DEPOSITED BY THE
UNITED STATES OF AMERICA

LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

HEARINGS

BEFORE THE

SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS

OF THE

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS UNITED STATES SENATE

EIGHTY-FIFTH CONGRESS

SECOND SESSION

ON

S. 2375, S. 3186, S. 3199, S. 3307, S. 3315, S. 3537, S. 3892, and S. J. Res. 16

CONCERNING THE MINING AND MINERALS INDUSTRY

MARCH 24, 25, 26, 27, AND 28, 1958

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LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

MONDAY, MARCH 24, 1958

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10:30 a. m., in room 224, Senate Office Building, Hon. James E. Murray (chairman) presiding.

Present: Senators Murray, Bible, Carroll, Malone, Dworshak, and Barrett.

Present also: Senators Anderson and Church.

Staff members present: Robert W. Redwine, assistant counsel to the committee, and George B. Holderer, staff engineer.

The CHAIRMAN. The subcommittee will come to order.

I know there are many here who are curious as to why the door of the hearing room was not open at the time set for starting this inquiry. The answer is simple. The committee had asked the Office of Defense Mobilization for the development of certain testimony it was felt necessary the committee have for guidance in its considerations. The Office of Defense Mobilization felt it could give that testimony only in executive session as it is of a classified nature.

That portion of the hearing started at 9:30 and has now been completed.

This hearing has been called for a single purpose; namely, to determine how best the Congress of the United States can act to reestablish the mining and minerals industry of the Nation upon a sound economic foundation.

Unemployment is more rampant in mining than any other general field. Hundreds upon hundreds of small mines have closed down completely in recent months. Our larger mines—those which employ hundreds and thousands of workers each—have been forced to curtail production.

Dividends from mining operations are rapidly becoming only conversation topics that are recalled when there is discussion of the good old days.

Something has to be done, and done quickly, if our minerals extractive industries are to be kept a meaningful part of the mobilization base necessary for the security of the Nation.

The so-called long-range minerals program submitted last June by the administration unfortunately proved to be fictional rather than real.

Industry representatives who testified before this committee following its submission by Secretary of the Interior Fred A. Seaton labeled

the program as being inadequate and charged that its adoption would result in hurting rather than helping domestic mining.

For many months I, as chairman of the full Interior and Insular Affairs Committee, and other members of the committee of both political parties, have been urging the administration to recommend to the Congress a realistic minerals program, acceptable to industry, and which would not be vetoed.

On February 18, I notified Secretary Seaton that I had called hearings to start today, March 24, and asked that he be the leadoff witness.

On March 12, 22 days later, the Secretary replied to my letter of February 18, stating that he would not be prepared on this day to make recommendations in this all-important matter of a basic industry whose very lifeblood is being drained away by conditions not under its control.

After consultation with Secretary Seaton's personal representative, the decision was made to go ahead with the hearing today, as time has become the essence of the matter.

Other governmental departmental officials and industry witnesses will be heard, as will be several western governors who have expressed grave concern over the deterioration of domestic mining.

Secretary Seaton has indicated that he will be in a position to submit the administration's recommendations around the 15th of April. Perhaps a careful study of the transcript of these hearings will help the Secretary in formulating his program. I have requested him to set a definite date when it will suit his convenience to appear.

I hope that that date will not be so long in the future that his appearance will be in the nature of a post mortem on domestic mining rather than a consultation to determine remedies for a sick industry.

I am determined—and I know that many of my colleagues are also—not to let our great copper, lead, and zinc industries and the other important segments of our overall minerals extractive industries go by the board without making a fight to save them from economic disaster.

Before calling our first witness this morning, I wish to place in the record my letter of March 11 to Mr. Gabriel Hauge, administrative assistant to the President, requesting that he appear before this subcommittee, and his reply dated March 13, stating that he must decline.

(The letters referred to follow:)

UNITED STATES SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
March 11, 1958.

MR. GABRIEL HAUGE,
Administrative Assistant to the President,
Executive Office Building, Washington, D. C.

DEAR MR. HAUGE: I attach herewith copy of a letter dated February 18, addressed to Secretary of the Interior Fred A. Seaton, announcing the opening of hearings before this committee on March 24 in respect to the domestic minerals industries.

I call your particular attention to the first paragraph of that letter which reads, "History has taught us that falling mineral and metal prices, followed by decreasing domestic production with miners forced into the bread lines, is the bellwether of depressions. It is needless for me to point out that this Nation's minerals extractive industry is in a serious economic squeeze."

I also direct your attention to the statement in that letter quoting Secretary Seaton as having informed the committee on June 4:

"If we include the manufacturing industries turning out machinery and other products derived from metals and minerals we find fully one-fourth of our total national income generated by this sector of our economy."

In view of the above-mentioned facts and the widespread unemployment in the "sector of our economy" which accounts for the generation of "fully one-fourth of our national income," and your intimate knowledge of and official responsibilities in the field of the national economy, it is highly desirable that you appear to present your views before the committee, and it will be appreciated if you will advise me as to what day and hour during the week of March 24 it will be convenient for you to appear.

Thank you for your cooperation in this matter.

Sincerely yours,

JAMES E. MURRAY, *Chairman.*

THE WHITE HOUSE,
Washington, March 13, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

DEAR SENATOR MURRAY: I have your letter of March 11 in which you invite me to appear before the Committee on Interior and Insular Affairs in its hearings with respect to the domestic minerals industries.

As a member of the President's staff, my only official responsibilities are to advise the President on economic and other matters. This confidential relationship to the President precludes me from accepting your invitation to appear before the committee, and I must decline. I do appreciate, however, your feeling that my testimony would be helpful.

GABRIEL HAUGE,
Special Assistant to the President.

The CHAIRMAN. I then order to be printed the various bills pertaining to these hearings.

(S. 2375, S. 3537, and S. J. Res. 16 follow:)

[S. 2375, 85th Cong., 1st sess.]

A BILL To provide a program for the development of the minerals resources of the United States, its Territories and possessions by encouraging exploration for minerals and providing for payments as incentives for the production of certain minerals, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That it is declared to be the policy of the Congress to stimulate exploration for minerals and to provide Federal financial assistance to assure the continuation of production of certain essential minerals within the United States, its Territories and possessions.

TITLE I

SEC. 101. The Secretary of the Interior is hereby authorized and directed, in order to provide for additional development of domestic mineral resources, to establish and maintain a program for exploration by private industry within the United States, its Territories and possessions for such minerals, excluding organic fuels, as he shall from time to time designate, and to provide Federal financial assistance on a participating basis for that purpose.

SEC. 102. (a) In order to carry out the purposes of this title, and subject to the provisions of this section, the Secretary is authorized to enter into exploration contracts with individuals, partnerships, or corporations which shall provide for such Federal financial participation as he deems in the national interest. Such contracts shall contain terms and conditions as the Secretary shall deem necessary and appropriate, including terms and conditions for the repayment of the Federal funds made available under any contract, together with interest thereon, to be calculated from the date of first production or certification, whichever shall first occur. Such interest shall be at rates which (1) are not less than the rates of interest which the Secretary of the Treasury shall determine the Department of the Interior would have to pay if it borrowed such funds from the Treasury of the United States, taking into consideration current average yields on outstanding marketable obligations of the United States with maturities comparable to the terms of the particular contracts involved and (2) shall be adequate to cover, in addition, the costs of administering the particular contracts.

(b) Whenever minerals are produced and sold by the contractor or his successor in interest from the area described in a contract authorized by this title, there shall be paid to the United States a royalty on the value of said production which shall be applied toward the repayment of the Federal funds expended under the contract, including interest on such funds. Such payments shall be covered into the miscellaneous receipts of the Treasury.

(c) As soon as practicable, upon completion or termination of the exploration project undertaken pursuant to a contract, the Secretary shall certify to the contractor that an obligation to pay royalty on future production, as specified in the contract, has accrued, or the Secretary shall inform the contractor that no further obligation exists under the contract. Certification shall be made when an analysis and evaluation of the results of the exploration project discloses that mineral production from the area covered by the contract is possible. Upon certification, payment of royalties shall be a charge against production for the period specified in the contract or until the obligation has been discharged, but in no event shall such royalty payments continue for a period of more than twenty-five years from the date of contract.

(d) No provision of this title, nor any rule or regulation which may be issued by the Secretary shall be construed to require any production from the area described in the contract.

(e) No funds shall be made available under this title unless the applicant shall certify that he is unable to finance the proposed exploration activities and that funds from commercial sources are unavailable on reasonable terms.

(f) The Secretary shall establish and promulgate such rules and regulations as may be necessary to carry out the purposes of this title: *Provided, however,* That he may modify and adjust the terms and conditions of any contract to reduce the amount and term of any royalty payment when he shall determine that such action is necessary and in the public interest.

SEC. 103. As used in this title, the term "exploration" means the search for new or unexplored deposits of minerals, including related development work, within the United States, its Territories and possessions, whether conducted from the surface or underground, using recognized and sound procedures including standard geophysical and geochemical methods for obtaining mineralogical and geological information.

SEC. 104. Departments and agencies of the Government are hereby authorized to advise and assist the Secretary of the Interior, upon his request, in carrying out the provisions of this title and may expend their funds for such purposes, with or without reimbursement, in accordance with such agreements as may be necessary.

TITLE II

SEC. 201. The Secretary of the Interior is hereby authorized and directed, in order to assure the continuation of production of certain essential minerals within the United States, its Territories and possessions, to establish and maintain a program of payments to domestic producers of those minerals listed in section 202 of this title, within the limits therein contained, as an incentive for the production of such minerals.

SEC. 202. (a) The production incentive payments authorized by this title shall be made for the following minerals mined from deposits located within the United States, its Territories and possessions, in the amounts and subject to limitations herein specified:

(1) For beryl concentrates (10 percent BeO basis), $70 per short ton, with premiums and penalties as set forth in the regulations issued pursuant to section 204 of this title, for not to exceed an aggregate of seven hundred and fifty short tons annually. No incentive payment shall be made in a calendar year on a quantity in excess of one hundred short tons produced by any one producer and originating in any one mining district from properties controlled by such producer.

(2) For commercial grade, metallurgical chromite (46 percent basis), $21 per long dry ton, with premiums and penalties as set forth in the regulations issued pursuant to section 204 of this title, for not to exceed an aggregate of fifty thousand long dry tons annually. No incentive payment shall be made in a calendar year on a quantity in excess of ten thousand long dry tons produced by any one producer and originating in any one mining district from properties controlled by such producer.

(3) For commercially acceptable columbium-tantalum concentrates (basis 50 percent contained combined pentoxides), $2.35 per pound, with ratios of

Ta_2O_5—Cb_2O_5, premiums and penalties as set forth in regulations issued pursuant to section 204 of this title, for not to exceed an aggregate of twenty-five thousand pounds annually. No incentive payment shall be made in a calendar year on a quantity in excess of five thousand pounds produced by any one producer and originating in any one mining district from properties controlled by such producer.

(b) No payment shall be made under this title for any material produced prior to the date of initiation of the programs authorized herein. The incentive payment programs shall be initiated upon termination of existing purchase programs of the Federal Government for these materials, respectively, under authority of the Strategic and Critical Materials Stockpiling Act (53 Stat. 811), as amended; the Defense Production Act of 1950 (64 Stat. 798), as amended; and the Domestic Tungsten, Asbestos, Fluorspar and Columbium-Tantalum Production and Purchase Act of 1956 (70 Stat. 579).

(c) No incentive payment shall be made pursuant to the provisions of this title except upon presentation of evidence satisfactory to the Secretary that the material has been produced and sold in accordance with regulations issued under section 204 of this title.

SEC. 203. The Secretary of the Interior may delegate any of the functions conferred upon him by this title.

SEC. 204. The Secretary of the Interior is authorized to issue such rules and regulations as he deems necessary and appropriate to carry out the provisions of this title.

TITLE III

SEC. 301. The Secretary of the Interior is authorized and directed to present to the Congress, through the President, within two years from the date of this Act, a report containing a review and evaluation of the operations of the programs authorized in this Act, together with his recommendations regarding the need for the continuation of the programs and such amendments to this Act as he deems to be desirable.

SEC. 302. There are hereby authorized to be appropriated, from any funds in the Treasury not otherwise appropriated, such sums as may be necessary to carry out the provisions of this Act.

[S. 3537, 85th Cong., 2d sess.]

A BILL To encourage the discovery, development, and production of manganese-bearing ores and concentrates in the United States, its Territories, and possessions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Domestic Manganese Program Extension Act of 1958".

SEC. 2. It is hereby recognized that the continued dependence on overseas sources of supply for manganese minerals and metals during periods of threatening world conflict or of political instability within those nations controlling the sources of supply of such materials gravely endangers the present and future economy and welfare of the United States. It is therefore declared to be the policy of the Congress that each department and agency of the Federal Government charged with responsibilities concerning the discovery, development, production, and acquisition of manganese minerals and metals shall undertake to decrease further and to eliminate where possible the dependency of the United States on overseas source of supply of such material.

SEC. 3. (a) In carrying out the declaration of policy set forth in section 2 of this Act—

(1) the termination date of the carload purchase program designed to stimulate the domestic production of metallurgical grade manganese ores and concentrates established by regulations issued pursuant to the Defense Production Act of 1950, as amended, shall be extended to the close of June 30, 1963;

(2) the quantity of manganese that may be delivered and shall be accepted under the program to encourage expansion of domestic production of manganese by providing a uniform price scale for small domestic producers of metallurgical grade manganese ores and concentrates shall be increased from twenty-eight million long dry ton units of manganese to sixty million long dry ton units of manganese. The ten thousand long dry tons limitation under such program shall be eliminated, but no manganese ore or concen-

trates shall be eligible for delivery under such program from any mine which had an actual production of more than ten thousand long tons of ore containing 40 per centum or more metallic manganese (by weight, dry basis) in any of the calendar years 1952 through 1956.

(3) existing prices, chemical and physical requirements, and other conditions for the purchase of manganese ores and concentrates under the existing program shall be continued in effect under the program as enlarged and extended by this Act.

(b) (1) Notwithstanding paragraph (3) of subsection (a), the office or agency of the United States administering the purchase programs for domestic manganese ore may relax the chemical and physical requirements and other condition prescribed in such program in order to further stimulate and encourage increased domestic production of manganese-bearing ores and concentrates.

(2) Nothing in subsection (a) of this section shall be construed to limit or restrict the officer or agency of the United States administering the purchase programs for domestic manganese ore from extending the termination date provided for by paragraph (1) of subsection (a) or from increasing the quantity limitations provided for by paragraph (2) of subsection (a).

SEC. 4. In order that those persons who produce or plan to produce under the purchase program established pursuant to this Act or the Defense Production Act of 1950, as amended, may be in position to plan their investment and production with due regard to requirements, the officer or agency of the United States administering the purchase programs for domestic manganese ore shall publish at the end of each calendar quarter the amounts of ores and concentrates purchased during that quarter under each program and the total amounts of such purchases under each program.

SEC. 5. There are hereby authorized to be appropriated, out of any moneys in the Treasury not otherwise appropriated, such sums as may be necessary to carry out the provisions of this Act.

[S. J. Res. 16, 85th Cong., 1st sess.]

JOINT RESOLUTION To establish a joint committee to investigate the gold mining industry

Whereas, during World War II, mining operations in many gold mines throughout the United States were discontinued pursuant to Government order; and

Whereas, during World War II and subsequent thereto, the cost of mining operations has greatly increased; and

Whereas the price of gold in the United States was fixed during the period of low operation cost at the date of $35 per ounce by the Federal Government and that price has continued until the present time; and

Whereas as a result of the foregoing conditions more than 90 per centum of the gold mines scattered throughout the United States have been forced to close: Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That there is hereby established a joint committee, to be known as the Joint Committee on the Gold Mining Industry (hereafter referred to as the "joint committee") which shall be composed of sixteen members as follows: (1) Five members who are Members of the Senate; (2) five members who are Members of the House of Representatives; and (3) six members from persons in private life who are familiar with the gold mining industry. The members who are Members of the Senate and three of the members from private life shall be appointed by the President of the Senate, and the members who are Members of the House of Representatives and three of the members from private life shall be appointed by the Speaker of the House of Representatives, but not more than three of the Members appointed from either House of Congress shall belong to the same political party.

SEC. 2. It shall be the duty of the joint committee to make a full and complete study and investigation of the gold mining industry in the United States and to report to the Senate and the House of Representatives at the earliest practicable date the results of its study and investigation, together with its recommendations as to legislation necessary to reestablish, as an integral part of the American economy the production of gold in the United States.

SEC. 3. The joint committee shall have power to employ and fix the compensation of such officers, experts, and employees as it deems necessary in the performance of its duties.

SEC. 4. The expenses of the joint committee, which shall not exceed $, shall be paid one-half from the contingent fund of the Senate and one-half from the contingent fund of the House of Representatives upon vouchers signed by the chairman. Disbursements to pay such expenses shall be made by the Secretary of the Senate out of the contingent fund of the Senate, such contingent fund to be reimbursed from the contingent fund of the House of Representatives in the amount of one-half of the disbursements so made.

The CHAIRMAN. Mr. Conover will be the first witness.

STATEMENTS OF JULIAN D. CONOVER, EXECUTIVE VICE PRESIDENT, AMERICAN MINING CONGRESS; S. H. WILLISTON, EXECUTIVE VICE PRESIDENT, CORDERO MINING CO., PALO ALTO, CALIF.; AND CHARLES E. SCHWAB, ASSISTANT TO THE PRESIDENT, BUNKER HILL CO., SAN FRANCISCO, CALIF.

Mr. CONOVER. My name is Julian D. Conover. I am executive vice president of the American Mining Congress, a national organization of the mining industry of the United States.

I am very glad to have the opportunity to appear here today, and can assure you that the mining industry is most appreciative of this committee's efforts to develop sound and constructive mineral policies which will maintain a healthy and vigorous mining industry in this country.

Mr. Chairman, as you have pointed out on various occasions, I know of nothing of greater importance to the welfare and long-range future of our country.

I should like to present a general introductory statement, giving the overall views of the mining industry on national policies affecting our industry.

Accompanying me today are Mr. S. H. Williston, executive vice president of Cordero Mining Co., Palo Alto, Calif., who is a director of the American Mining Congress, and for many years has been chairman of our strategic minerals committee, and Mr. Charles E. Schwab, assistant to the president, the Bunker Hill Co., San Francisco, who is chairman of the emergency lead-zinc committee. With your permission I should like to refer questions to them pertaining to the industries with which they are closely associated.

We understand that numerous other representatives of the mining industry will appear before you to discuss the problems of particular minerals or metals, and we trust that the hearings will bring out fully the difficult problems confronting many branches of the mining industry today.

At the outset we should like to submit for the record the declaration of policy adopted by the mining industry at our convention in Salt Lake City last September. Similar declarations have been adopted in previous years, and we have consistently urged the same basic principles and policies for meeting the problems of the mining industry. Many of you have taken an active part in these conventions and have given us the benefit of your views on policy matters.

Many of our policy statements involve matters which do not fall within the jurisdiction of this committee. They are, however, of

great importance to the welfare of the mining industry and are accordingly submitted so that this committee's record will be complete.

We have on numerous occasions submitted to the appropriate committees of the Senate and the House our views on taxation, on tariffs and trade agreements, and on various other subjects. Earlier this year we urged the Ways and Means Committee to make certain amendments in the natural resources provisions of the Internal Revenue Code which would remove roadblocks to mining enterprise, and, more recently, in connection with the proposed extension of the Trade Agreements Act, we have urged that the authority over tariffs be restored to the Congress, and that specific measures for the protection of the mining industry be enacted.

Last year the Secretary of the Interior submitted to this committee the administration's recommendations for a long-range minerals program. Although the suggested program left open many of the problems involved in maintaining a "strong, vigorous and efficient domestic minerals industry," as called for in the November 30, 1954, report of the Cabinet Committee on Minerals Policy, in the case of lead and zinc it did recognize a principle which the mining industry has consistently advocated, the establishment of excise taxes on imports, to become effective when price declines threaten injury to domestic producers, and to be suspended when prices are at an economic level that permits the industry to maintain a reasonable mobilization base.

The recognition of this principle marked a definite step forward. We believe that the adoption of adequate import taxes, to be applied below the appropriate peril points, is the best and most workable answer to the problems of various important branches of the mining industry. This will be further discussed below.

The Interior Department report included various constructive recommendations as to increased topographic and geologic mapping, intensified research, and a continuing program of financial assistance in the exploration for new ore bodies, such as has been conducted for some years by the Defense Minerals Administration. Under the latter recommendation, however, any applicant for exploration assistance would be required to certify that he was unable to secure funds from other sources. Such a requirement, commonly characterized as a pauper's oath, would largely destroy the value of the current program being conducted by the Defense Minerals Exploration Administration.

This program, as now operated, serves to encourage competent mining companies, both large and small, to undertake exploration projects which normally could not be justified as having a reasonable probability of return. As a long-range measure to encourage the search for new mines and the development of new reserves—which is so important to the continuation of our mining industry as a source of basic raw materials—we urge that the defense minerals exploration program be continued without any such restriction.

I should like to comment at this time that the present program as conducted by the Administrator, Mr. C. O. Mittendorf, is very ably and soundly handled. It has been helpful to the industry and has accomplished some real results for this country in discovering and developing new mineral reserves.

Now, the discovery of new ores bodies is helpful only if we have a healthy mining industry and only if the potential market for minerals

discovered is not preempted by foreign competition. The DMEA program is very important, but it is not the whole answer to our problem.

At this point, I should also like to call the committee's attention to an amendment to the income-tax law which we are strongly urging. Under present law expenditures for exploration may be deducted from income only within certain limits—a maximum of $100,000 per year for a maximum of 4 years for each taxpayer, not for each property.

Most mining taxpayers have already used up their 4 years and are not allowed to deduct any exploration expenditures. In other words, they have to pay for them out of income after taxes, or looked at another way, they have to merge them into their depletion allowance with no effective deduction for the exploration expenditures.

Senator CARROLL. Would you yield at that point?

Mr. CONOVER. Yes, sir.

Senator CARROLL. Is there such a limitation placed on oil and gas exploration?

Mr. CONOVER. No such limitation.

Senator CARROLL. Do you know why they placed a 4-year limitation on mining?

Mr. CONOVER. That was the first step, Senator Carroll. It was done presumably as a tryout. I would say it was a compromise and it was all that the members of the Senate Finance Committee were able to get into the law at the time.

Senator CARROLL. This 4-year limitation does not apply to exploration for oil and gas?

Mr. CONOVER. No, the so-called intangible drilling and developmental costs are allowed and there is no limitation as to time and no limitation as to dollar amount in any one year.

In the mining industry on the other hand, the exploration expenditures are limited and most of the amounts provided by that limitation have been used up with the passage of the years.

Senator CARROLL. You have raised this with the Ways and Means Committee?

Mr. CONOVER. Very definitely, sir.

Senator CHURCH. May I ask what recommendation the industry has to make, or do you include specific recommendation as to the change in the law?

Mr. CONOVER. We recommend that the limitations be removed, that the exploration expenditures be fully——

Senator CHURCH. You mean the limitation as to amount or yearly limitation?

Mr. CONOVER. Both; the matter of exploring for new mines, Senator Church, is definitely speculative. You are taking long odds. Generally only 1 out of 50, or 1 out of 100 prospects that show promise ever become a real mine.

With those odds against you, if you are going to take away the incentive to make a discovery through taxation it is like having a lottery without any prize.

Senator MALONE. Did we not remove the incentive for developing reserves when we put into the hands of one man the right to trade the industry off to further his foreign policy?

In other words, you have no principle.

Mr. CONOVER. Senator, I know exactly what you are speaking of and I get into that subject quite fully here. I would like to develop it shortly.

That is a very definite point, the question of incentive to develop reserves to continue operations. If our market is to be taken by low-cost foreign production and you have no protection against it, you have taken away the incentive.

Senator MALONE. There are two gimmicks here. Congress always tried to arrive, awkwardly at times, at a tariff that would make a difference between the effective wage standard and taxes and other costs of doing business here and in the cheap competing country on its product. Was that not the objective?

Mr. CONOVER. That was the basic principle.

Senator MALONE. In 1934 the change in that objective put that in the hands of the executive to approve or disapprove any change in the duty or tariff structure and allowed many to trade or barter any of this industry even though he knew protection was needed.

He could refuse to do that if he thought it would hurt his foreign policy. You understand that?

Mr. CONOVER. Very definitely.

Senator MALONE. There is a second gimmick. That is in 1947 when GATT was organized, was transferred to Geneva. You are familiar with that?

Mr. CONOVER. Yes.

Senator MALONE. Now, 37 nations each with 1 vote make multilateral trade agreements agreeing to lower tariffs.

Mr. CONOVER. They are an overall national-international governing body in which we have one voice.

Senator MALONE. Now, they do not have to keep their part of the agreement as long as they can show they are short of dollar balance payments; is that not true?

Mr. CONOVER. That is right.

Senator MALONE. Then it is impossible for private money to be invested in exploration?

Mr. CONOVER. It is very hard.

Senator CARROLL. You have some American mining corporations that operate in foreign countries; do you not?

Mr. CONOVER. There are companies that operate in foreign countries.

Senator CARROLL. And the depletion allowance applies to all mining companies or corporations whether they operate in America or foreign countries; is that not true?

Mr. CONOVER. That is true, Senator.

Senator CARROLL. Will we have figures and statistics to show how much these American mining corporations operate in foreign countries, and how much they contribute to the production of ore that comes into this country?

Mr. CONOVER. Senator, I would say that the depletion allowance, the basic principle, is the return of the capital value of the ore body. That is not the answer to foreign competition. That is a basic principle of a wasting asset industry.

Senator CARROLL. I understand. Whether or not it is the principle, it is the one that they apply.

Mr. CONOVER. That is true.

Senator CARROLL. When they operate in a foreign country just as gas and oil.

Mr. CONOVER. That is true.

Senator CARROLL. Anywhere in your comments, do you show the operation of the American corporations in foreign countries and what their holdings are and what their production is and how it affects our own market at home? Has that study ever been made by the mining congress?

Mr. CONOVER. I don't know of any figures of that sort, Senator Carroll.

Senator MALONE. In order to keep the record straight, Senator Carroll, you are exactly right on oil and gas. Twenty-seven and a half percent applies to all foreign nations as it does here and there is quite a discussion that is going to take place in the Senate Finance Committee on that subject.

For many years we had 15 percent depletion allowance for about 25 or 26 of these minerals under discussion that applied every place but in 1954. After we made these reports, the Senate committee here, Senate Document 83 of the 84th Congress, it was brought up in the Senate Finance Committee and we extended the depletion allowance from 15 percent to 23 percent on about 26 of these minerals, but confined it to domestic minerals.

So the addition from 15 to 23 only applies domestically.

Senator CARROLL. You mean the Senate Finance Committee, if I understand correctly, increased the depletion allowance percentagewise from 15 to 23 percent, but confined that to the continental limits of the United States.

Senator MALONE. That is right.

I understand thoroughly what the Senator is driving at and I think he has an important point. I think the head of our mining congress can understand thoroughly those things and maybe you can question him later about that.

The CHAIRMAN. You may proceed.

Mr. CONOVER. Looking to the future, the discovery of new mineral deposits is vital to the maintenance of our standard of living and the preservation of our Nation's leadership in the world. Costs of exploration, especially the search for ore bodies hidden deep below the surface—and that is mostly what we have left—have increased enormously, and all too many exploration programs do not succeed in finding a commercial deposit.

Senator MALONE. How much of the surface of the United States has been geologically mapped? Is it 10 percent or 15 percent?

Mr. CONOVER. It is on that order.

Senator MALONE. I think it has been generally assumed, but I doubt it very much, that prospectors have gone over a great acreage, but it has not been prospected thoroughly.

You cannot find them under a situation where $2 labor is in direct competition with it; is that not right?

Mr. CONOVER. That is true. The surface has been pretty well combed by prospectors. The easy finds have been pretty well developed.

Senator MALONE. You can go further there and say that a mining engineer rarely discovers a mine. They turn them down. It is just the people that do not believe that the metal is not there that find it. Mostly by accident.

Mr. CONOVER. We are both engineers, Senator.

Senator MALONE. I know what I am talking about. It is all poppycock that engineers find mines. They turn them down.

Mr. CONOVER. If the risks of seeking out new mineral reserves are to be undertaken, those willing to hazard the large sums required should by all means be allowed to charge off such expenditures against taxable income. We feel strongly that the present limitations on the deduction of exploration costs should be repealed.

The Interior Department's recommendations with regard to particular minerals were fully discussed before your committee by producers most familiar with the problems involved, and we understand that further specific proposals will be presented by the various branches of the industry during the current hearings. We are sure that your committee will give earnest consideration to their suggestions, and trust they will be helpful to you in recommending practicable and constructive programs.

Now, as to our overall views on mineral policy:

Most of the nonferrous and strategic minerals industries—with which we understand your committee is particularly concerned at this time—are today in serious straits.

Senator BIBLE. How many people are employed in the nonferrous strategic mineral industries of the Nation? Do you have any approximate figure on that?

Mr. SCHWAB. I would have to confine my remarks to the lead and zinc phases of it. I know those quite accurately.

Mr. CONOVER. What would you say there?

Mr. SCHWAB. About 35,000, including mining and smelting today.

Senator BIBLE. That is directly affected. Do you have any estimate of how many indirectly affected?

Mr. SCHWAB. We generally multiply the figure by 3 or 4.

Mr. CONOVER. I would say you could probably approximately double that to bring in copper. And how many for strategic, if we had a reasonable level of production?

Mr. WILLISTON. You add the copper, lead, and zinc, you take 20 percent of that.

Mr. CONOVER. That would be 85,000 directly affected. You can multiply that by four. Then you mushroom that out to take account of the consuming industries. You have a very important segment of our population that is affected.

Senator BIBLE. I realize my question might be a little premature and would take some study on your part to supply figures. I think they would be helpful to the committee because we constantly hear various figures batted back and forth as to how many are directly and indirectly affected.

I think it might help the record if you would supply those figures.

Mr. CONOVER. We will do so.

(The information is on file with the committee for reference purposes.)

Senator MALONE. You mean by each metal, by tungsten, by copper, as near as they can break it down, have the total and break it down?

Senator BIBLE. And those directly affected as well as those indirectly affected.

What impact does it have upon the domestic segment of our industry?

Mr. CONOVER. With those figures also there is, as you know very well, a great concentration of the mining activities in certain areas and certain States so that the impact in those States is particularly severe.

The whole economy and the tax revenue, local, State, and national, is tremendously affected by the depression we now have in our mining industry.

Senator MALONE. Will you add to that information, too, the current unemployment in the industry, if you can do that?

Mr. CONOVER. We will be glad to get approximations at least for you.

Senator BIBLE. Please pardon the interruption.

Mr. CONOVER. Your chairman recently delivered an able address on this subject to the Mine-Mill Union in Denver, and you are all familiar with the depressed condition of the industry, marked by curtailment of operations, shutdown mines and plants, unemployment and distress in the mining communities.

The major cause of these conditions is world overproduction and excessive imports, which have depressed prices below economic levels—levels at which enough of our own mines can operate to maintain a reasonable mobilization base. My remarks will accordingly be directed first to this problem of excessive imports, on which our position is set forth in the declaration of policy adopted at Salt Lake City.

Specifically, we recommend that Congress reestablish and exercise its authority over tariffs. We believe that adequate import taxes and tariff protection, properly applied, are necessary to maintain the domestic mining industry. Therefore, we strongly urge prompt enactment of legislation, as follows:

1. That as to those metals and minerals in which the United States produces a substantial portion of our domestic requirements, adequate import taxes be established, to be imposed and collected only if and when the average monthly price falls below a reasonable prescribed point legislated for each metal and mineral respectively; thus providing a market free of any duty for foreign imports so long as the average monthly price is at or above the prescribed point.

2. That as to those metals and minerals which are produced domestically sufficient only to provide a small percentage of our requirements, special governmental programs in line with the circumstances in each case should be instituted and maintained to encourage continuance of such industries.

3. When the enactment or application of adequate import taxes and tariffs is not feasible, or otherwise fails to do what is necessary to protect the domestic mining industry, we recommend that import quotas be provided in cases where such device is practical.

4. We urge that Congress amend the antidumping act of 1921, to provide adequate provisions for greater certainty, speed and efficiency in administration and enforcement, particularly as applied to metals and minerals.

Senator MALONE. What you are trying to do is to protect the standard of living and the wages and taxes we pay and everything taken together, the difference between the cost of production in this country and in the cheap foreign countries. That is what you are trying to get at?

Mr. CONOVER. That is right.

Senator MALONE. I will talk about it later when you are finished. I do not want to interrupt you now.

You know when you fix the peril point you know all that nation has to do is to manipulate in terms of the dollar value and your peril point is pretty well up the river with no paddle.

Mr. CONOVER. What we are speaking of here is a legislated peril point.

Senator MALONE. It does not mean anything if you change the value of the money, the peril point is out of the window.

Mr. CONOVER. We realize how much the depreciation of other currencies has contributed to the problem. This peril point does not have the same significance as is used in the Trade Agreements Act, as I believe you will see when I develop the subject.

Metals and minerals of which this country produces a substantial portion of our requirements are typified by copper, lead, and zinc. As to such minerals, we believe the most effective, most readily administered and fairest answer to the industry's current and long-range problem is the enactment of an adequate import tax, to be imposed whenever the average monthly price falls below a suitable peril point, and with the tax suspended at times when the market is above such a peril point.

Senator MALONE. Let me make one suggestion here. If we were not producing more tungsten than we use in the country annually when we fixed the price enough above the world price to make the difference in the labor and taxes, you are aware of that.

Mr. CONOVER. I speak of those later on. These are minerals as to which there has been concrete study as to what the peril point should be.

Senator MALONE. I am glad to hear you say that your peril point has no connection with your peril point in the trade.

Mr. CONOVER. It is a term of reference that does not apply in quite the same sense as in the Trade Agreements Act.

Senator MALONE. It is confusing.

Mr. CONOVER. I can see it is possibly not well chosen.

Senator ANDERSON. Can you tell us what adequate import tax is?

Mr. CONOVER. As to copper, I would say that an adequate import tax would be 4 cents per pound.

As to lead, 4 cents a pound.

And as to zinc, 4 cents a pound.

Senator MALONE. That is under present conditions. If these countries manipulate their currencies in terms of the dollar tomorrow, it would be different.

Mr. CONOVER. It would still be at the peril point. There would be a substantial differential, a penalty against excess imports which were brought into this country in such quantities as to depress the price below that set point.

Senator MALONE. Now, right now, you have had an example of independent copper mines closing down at 28 cents. Apparently their breakeven point was around 28 or 29 cents. You can produce copper in several of these foreign nations for about half that, can you not?

Mr. CONOVER. I am not too familiar with the foreign costs, but it is definitely below that figure, sir.

Senator MALONE. I think it would be very helpful if we went into that before you settled on 4 cents, 6 cents, or 2 cents. Maybe the Tariff Commission could determine in each case what that ought to be.

Mr. CONOVER. The studies require so much time I would not want the industry to die while the diagnosis is being made.

Senator MALONE. We could adjust it when the change became apparent. Do not these industries produce copper in both foreign and domestic plants?

Mr. CONOVER. There are companies that have both foreign and domestic production; that is true.

Senator MALONE. I think most of the product is represented by these companies.

Now, we have a company in Nevada, it was just below the break-even point long enough so they sold out. I do not think you will find many independent copper mines. You have the Phelps-Dodge in Peru. I was there in 1954 when they were building it then. It was one of the largest deposits in the world. That is, it rates with the largest deposits.

Mr. CONOVER. It is to their interest that the domestic mines be allowed to continue.

Senator MALONE. I think it is a system whereby they manipulate the domestic mines. We had the president of New Jersey Standard Oil before us. They are importing enough oil so that they have the domestic wells down to about 40 percent or less of economic production.

I asked the direct question if he thought he ought to be allowed to determine how much oil comes in. He said "yes."

I thought that was very informative. That is what you believe in about these companies; is that right?

Mr. CONOVER. We believe in a formula which will protect domestic industry.

Senator MALONE. You have had that for a good many years. Maybe we will have to go back to it.

Go ahead. We will discuss that when we get to it.

Senator ANDERSON. Have you finished, Senator?

Senator MALONE. Yes.

Senator ANDERSON. What is a suitable peril point?

Mr. CONOVER. The consensus would be—in fact, it is generally agreed—as to lead, 17 cents a pound.

As to zinc, 14½ cents a pound.

As to copper, at least 30 cents a pound.

Senator MALONE. Does that not change as inflation goes along?

Mr. CONOVER. It might have to be changed.

Senator MALONE. What do you mean, it might have to be changed?

Mr. CONOVER. If the inflation changes the situation it undoubtedly would have to be.

Senator MALONE. The dollar in 1934 is generally acknowledged to be worth 34 cents now. They testified the 1948 dollar is worth 47 cents. That is about 5 percent annually.

So that would be a moving thing, too, would it not, a moving target?

Mr. CONOVER. If the trend continues——

Senator MALONE. What do you mean, if it continues? Do you see any signs of its slackening up?

Mr. CONOVER. I regret to say I do not at this time, but you can always hope.

Senator MALONE. We have been hoping for 24 years.

Senator ANDERSON. I asked the question, Mr. Conover, because I had an amendment before the Finance Committee which was not of my devising, but it was introduced in an effort to try to be helpful to the mining industry and it would seem to jump day by day. One time it was so many pennies, the next day it was so many pennies that the mining industry needed to have.

I thought if we could have a definite figure that was determined and arrived at by a mining organization——

Mr. CONOVER. These figures I give you are the figures which the industry has determined in just the manner you suggest, through further studies since that time.

Senator MALONE. It might be very helpful, Senator, to have a principle so that the people owning both foreign and domestic minerals would not be the one to determine how much to bring in.

Like Standard Oil testifying they want to be the judge as to how much oil they brought in from Arabia no matter what it did to domestic wells.

We have the president's testimony to that effect.

Senator ANDERSON. I recognize that. That is why I was going to ask Mr. Conover if he feels these figures are completely adequate to protect the mineral production of the United States.

Mr. CONOVER. I think they would be fair and adequate.

Senator ANDERSON. When you say fair, do you mean fair to the foreign producer?

Mr. CONOVER. Fair to the foreign producer to the extent—well, let me start over.

Fair to the domestic producer in that it gives him a price below which he has definite protection. It gives him a living price. It is fair to the domestic consumer in that it gives him a reasonable price.

By the same token, it is fair to the domestic producer in that the price is not so high that it encourages substitution and deprives him of the market.

All these metals are in competition with one another. If you put the price up too high, you do the producer of metal in this country a disservice.

And fair to the foreign producer in that it gives him the opportunity to import what we need with no import tax, but if he imports more than we need he pays the penalty.

He is better off with imports which supplement and meet our needs over and above domestic production, and a fair price and no tax, than he is with additional imports and a lower price and a 4-cent tax against it.

Senator ANDERSON. Let me put it this way: I started in newspaper work with a newspaper that was partly owned by the Chino Copper Co. in 1918 in New Mexico. At that time a nickel for lead and zinc was regarded as an ideal price and 14 cents for copper was really prosperity.

Now, translate these prices into the Chino mine in New Mexico. Is this going to permit, with a 30-cent copper price, with 4 cents import tax, that big open pit mine to run again at full blast?

Mr. CONOVER. I see no reason why not. I do not know the costs, but I would presume so.

Senator ANDERSON. They are pretty low. They are competitive. They are probably lower than some other companies.

Now, what about lead and zinc?

Mr. CONOVER. They have participated in, as I understand, in discussions within the industry in arriving at this as a suitable figure.

Senator ANDERSON. I realize we should look at these things from the whole viewpoint of the country, but I am a little bit still concerned about my home State.

Therefore, I am anxious to know if you think this lead and zinc price will permit the lead and zinc mines which are now closed in my State to stay open.

Mr. SCHWAB. I am sure it will.

Senator MALONE. You are familiar with the fact that copper has been extended to free trade on copper and having the peril point at 24 cents with a 2-cent tariff, what is to prevent this foreign copper from getting all the traffic will bear under your system when the domestic copper production, that is, the independents, are down, which they are and they are very low now.

Mr. CONOVER. When the price was above the peril point the independents——

Senator MALONE. There is no guaranty to the independent that the price of 54 cents will be there tomorrow, that is, in time for them to go into business or to enlarge their reserve, their mining.

Mr. CONOVER. The 54-cent copper was the result of a highly abnormal situation and was in a way hurtful to the copper industry.

If it is too high it encourages substitution.

Senator MALONE. The domestic and foreign production can balance that thing. They can run the price up but not long enough for the independent to get back into business. This is not the first time. I live out there in a copper country, and I saw O'Conner's outfit go broke. They had to sell out. They had no alternative.

Now, that happens under the system you are talking about. They manipulate it. Before you get this thing through Congress you will have to raise it because of inflation.

Go ahead.

Mr. CONOVER. As has been thoroughly brought out, in hearings befor the Finance and Ways and Means Committees, enactment of this proposal will provide protection for domestic producers against excessive and unneeded imports. It will permit needed imports, in quantities which do not depress the price below the peril point, to enter without import tax or other restrictions. It operates on the principle that imports should supplement but not supplant domestic production. It affords foreign producers access to our markets at fair prices, but penalizes imports in excess of those needed to supplement domestic production. It tends to stabilize the price at a level permitting a reasonable base of domestic production, and assures consumers of dependable supplies at reasonable prices. It operates automatically and is easily administered.

Legislation to implement this proposal in the case of copper has been sponsored by thirteen members of the Senate, including the chairman and members of this committee.

As to lead and zinc, the industry this year has not yet presented a recommendation inasmuch as an escape clause petition is still pending before the Tariff Commission.

Senator BIBLE. Do you have any indication when we might receive this recommendation?

Mr. CONOVER. I wish I knew. The rumor is that it would be out this month.

Senator BIBLE. That is this week, then?

Mr. CONOVER. That is pure rumor. I do not know.

Senator MALONE. You do not know, either, what action will be taken on it after the report is available?

Mr. CONOVER. I know of no more about that than I do about the actions of the Supreme Court.

Senator MALONE. Well, the Supreme Court is a little different. The Supreme Court is set up as a separate branch of government whereas the White House now is operating what was put in the legislative branch under article I, section (8). You are familiar with it, are you not? It says in article I, section (8), that the Congress shall regulate the duty and tariff and they shall regulate foreign commerce and the national economy, but now it is in the White House.

When it was in Congress you knew what you were going to do, did you not?

Mr. CONOVER. That is correct.

Senator MALONE. They could not trade it for foreign policy.

Mr. CONOVER. That is right.

Following action on this petition, or earlier if action is unduly delayed, the industry will be prepared to present to Congress its need for supplemental action in the form of import-tax legislation.

We believe this same principle—of import taxes applied below specified peril points—may equally well be applied to other metals and minerals which are produced in substantial quantities in this country. Cobalt, tungsten, mercury, and fluorspar were mentioned at your hearings last July as being susceptible to the same treatment as is being sought for copper, lead, and zinc. Witnesses from these industries will no doubt appear before your committee and will be able to suggest how this principle might be applied to their particular situations.

As the members of this committee know, we have consistently advocated import taxes or tariffs as the primary and most feasible means of protecting a domestic mineral mobilization base.

We recognize, however, that as to certain minerals or metals which are produced domestically in amounts meeting only a small percentage of our requirements, adequate import taxes or tariffs may not be feasible for this purpose, and that special governmental programs may be needed to encourage the continuance of such industries.

Predominantly the industries in this category are to be found among the so-called strategics. Mr. Williston will be able to give you a complete rundown as to the present situation in each of these industries and as to what they believe necessary to enable them to operate.

One proposal that has been advanced is the allocation of import receipts to domestic producers on an equitable basis—similar to the wool program—with a view to maintaining a minimum nucleus of production within this country.

These problems have also been considered by the conference of western governors on a number of occasions, and we are happy to learn that several of the governors will present their views at these hearings. We sincerely appreciate their constructive interest in the problems of the mining industry, and their forthrightness in urging positive action.

One important Government program which has been of definite aid since its inception has been the stockpiling of strategic and critical materials for defense purposes, and the maintenance of such stockpiles inviolate from withdrawals except for defense purposes.

We advocated the original adoption of the stockpiling program and have continued to support it over the years. It has been the backbone of our defense posture. We believe that stockpiling should be continued where goals have not yet been achieved, and suggest that it may afford a vehicle for special programs in the case of certain minerals as to which our domestic production is small, but is essential in times of national emergency.

We realize, of course, that the new concept of our defense needs has resulted in a reduction of the minimum and long-range goals for the national stockpile, thus making unnecessary the continued purchase of many metals and minerals. Consideration might be given, however, to limited stockpile purchases of certain strategic minerals from domestic sources, as a means of maintaining a nucleus of domestic production as part of our mobilization base.

Senator BIBLE. Will you explain that, Mr. Conover?

Mr. CONOVER. Even though our stockpile is, let us say, reasonably well filled, we have had such things as a supplemental stockpile.

In the case of lead and zinc large purchases were made for a supplemental stockpile. If the Congress has the figures from ODM as to what our needs are, as to how much more would be useful, or could be used for defense purposes, it is quite possible that a moderate supplemental stockpile might be suitable for some of these highly important strategic minerals.

Senator BIBLE. If you need more minerals for for defense purposes, why would you create another stockpile? Why not enlarge the present stockpile?

Mr. CONOVER. Of course, it is a question. These goals are set by defense authorities. We have no reason to question them. But the supplemental stockpile was started in the other case as additional insurance.

In case the estimates were possibly set too low——

Senator MALONE. I am interested in what you say about the stockpile being inviolate except for national defense. What do you mean by that?

Mr. CONOVER. That is the provision, Senator Malone, that the stockpiled materials are not subject to dumping on the market.

When the stockpile bill was originally enacted we took a very strong position on that, pointing out that if the stocks were subject to disposition at the whim of the board that was in charge, they would be an incubus overhanging the market; it would make for uncertainty, we might wake up the next morning and find out that large quantities of minerals had been offered for sale and the market price would be depressed.

Consequently we advocated and the members of the Congress took the same view, that the stockpile should be locked up and should be used only for defense purposes or on order of Congress.

In other words, they are locked up and Congress keeps the key.

Senator MALONE. Yes. You remember after World War I that Congress changed its mind and let loose their stockpile.

In other words, at any time if war was not imminent and the public decided we had too much money tied up in stockpiles, Congress could at any time turn it loose, could it not?

Mr. CONOVER. Yes. The situation after World War I, according to my memory, was particularly acute in the case of certain minerals such as copper, which had been used so extensively for cartridge brass. There were enormous stocks. They were not locked up in any way. It was at the close of World War II, recognizing that situation, that the industry advocated the freezing of the surplus and transferring it into a national defense stockpile.

Senator MALONE. Let Congress freeze it and let Congress unfreeze it; is that right?

Mr. CONOVER. We see no way to impugn the power of Congress.

Senator MALONE. You just cannot commit a future Congress.

Mr. CONOVER. That is right, but we have confidence in the wisdom of Congress to hold those stockpiles for the purpose for which they were created.

Senator MALONE. Under the present situation, but when the public decides that you have too much of something and there is no danger, is Congress not subject to public opinion?

Mr. CONOVER. That is one risk we must take. Congress has the ultimate decision on these matters.

Senator MALONE. I was only trying to bring that out in the record, that you have nothing whatever to do with it.

When Congress decides to turn it loose, it is turned loose.

Let me remind you that we furnished the money for England to build a stockpile of lead and zinc during the war. She turned it loose after the war and broke the market.

Mr. CONOVER. You are correct, and that is one reason why we have so strongly advocated the inviolability of our defense stockpile. It is getting more valuable all the time. It is the best possible kind of insurance for the future.

Senator MALONE. You have no assurance whatever what a future Congress will do. All you have to do is look back in the record to see what they have done.

Mr. CONOVER. My recollection is that there was no stockpiling act at that time. After World War II we did have a stockpiling act which did establish the principle which should have been established in World War I.

Senator MALONE. All I am saying to you is that we could abolish it tomorrow.

Mr. CONOVER. That is right.

Senator MALONE. Is it not true that England broke our lead and zinc market after World War II deliberately with their stockpile?

Mr. CONOVER. I have no reason to confirm the word "deliberately."

Senator MALONE. I have the evidence, and if you want to go into it sometime at your leisure, I will be happy to show it to you.

Mr. CONOVER. Those sales were a major factor in the terrible beating our lead and zinc industry took.

Senator MALONE. There are 10 volumes leading up to the report of the 83d Congress and you will find the testimony there where they broke the market.

Now, they are still furnishing money. They are still mining lead, copper, zinc, in that area, are they not?

Mr. SCHWAB. I do not know whether Senator Malone means there is any production in the British Commonwealth.

Senator MALONE. Africa and so forth.

Mr. SCHWAB. Yes.

Senator MALONE. I would like to know Mr. Schwab's background. Will you give it to me briefly?

Mr. SCHWAB. I had the pleasure of appearing before you, Senator, last August in the Senate finance hearings on lead and zinc.

Senator MALONE. Will you tell me briefly your background?

Mr. SCHWAB. I am a mining engineer by profession.

Senator MALONE. Where are you from?

Mr. SCHWAB. I am from Kellogg, Idaho.

Senator MALONE. Are you of the Schwab family; we have had a prominent Schwab family in the mining industry. Are you of that family?

Mr. SCHWAB. No, sir.

Senator MALONE. All I wanted to point out to the witness, Mr. Chairman, is that we have no protection from a stockpile except the existing act and Congress does anything it cares to do.

Also, foreign countries under our system at this time can break any mineral market that we have. It has been done and it is very easy to do.

Mr. CONOVER. In this connection we might suggest that stockpile goals be reviewed not only in the light of military needs, but also with consideration to the materials needed to rehabilitate areas of this country should it suffer an atomic attack. In this time of industrial recession, also, we suggest that the Government undertake to have stockpiled minerals and metals upgraded or converted to forms more readily usable in case of need.

The problems of the different segments of the mining industry are diverse and obviously must be considered on a case-by-case basis, taking into account the particular conditions of each material. In the consideration of these problems, information from defense and other agencies will no doubt be available to the Congress, to aid it in determining the extent of the mobilization base that should be maintained for each mineral.

Basically, as this committee is well aware, the Cabinet Committee on Mineral Policy has laid down the principle that a strong, vigorous, and efficient domestic mineral industry is essential to the long-term economic development of the United States and is vital to our national security.

We submit that that is a principle that never should be lost sight of.

Senator ANDERSON. Would you say they have implemented that by what has happened in the lead and zinc industry?

Mr. CONOVER. I would say that objective has not yet been attained.

I should now like to touch briefly on certain special problems of gold and silver, solid fuels, and mine taxation.

Gold and silver, as monetary metals, are largely keyed to the Treasury's fiscal and monetary policies. They are subject to rigid Government policies and fixed prices, which have not been changed for many years in spite of the tremendous increase in labor and other costs of production.

Gold miners are not free to sell their product in an open market, but are compelled to deliver it to the Treasury and to receive depreciated paper dollars in exchange.

Silver producers deliver their product, not at the monetary price, but at a seigniorage charge or discount of 30 percent from that price.

Gold and silver are of great importance to western mining, not only from the standpoint of those few gold and silver mines that have survived the blighting effect of these conditions, but also as important byproducts or coproducts of nonferrous metal mines.

We deeply appreciate the efforts of western Members of Congress to remove present restrictions on the purchase, ownership, and sale of gold—as exemplified in the bills introduced by your chairman and by Senator Malone and Senator Bible, which would restore a free market for gold. We highly commend also the efforts of western Senators to maintain and strengthen existing silver legislation.

As recommendations for future Government action in this field, we urge that:

1. The restrictions on the purchase, ownership, and sale of gold and silver by the United States be abolished.

Senator BIBLE. May I ask a question at that point?

Are we the only nation in the world that has those restrictions on purchase, ownership, and sale, at the present time?

Mr. WILLISTON. No, there are several other countries that do not permit their own citizens to hold gold.

Actually, as I recall, Switzerland, Venezuela, and Canada are the closest to the free gold trade people there are. Everybody else has monetary restrictions or monetary mismanagement, the same as we do.

Senator BIBLE. Did not Canada very recently remove the restrictions?

Mr. WILLISTON. That is a very recent one, not complete removal. In Switzerland and Venezuela it is completely removed.

In the United States no citizen may own gold, but any foreign government may have gold on demand in exchange for dollar deposits in New York. I think that is a very important factor for this committee to consider.

Senator MALONE. Mr. Chairman, I would like to ask at this point if England and France and those countries have restrictions so that their citizens cannot own gold?

Mr. WILLISTON. It certainly is not free. Exchange restrictions in and out of England and France are very severe.

Senator MALONE. I am talking about England and France.

Mr. WILLISTON. In France themselves, they can own gold.

Senator MALONE. Can they own gold in England?

Mr. WILLISTON. That I do not know.

Senator MALONE. I think you will find they can and in practically every nation in the world.

Mr. WILLISTON. But they cannot trade with it freely, sir.

Senator MALONE. What do you call trading with it?

Mr. WILLISTON. Buying and selling it outside the country without restriction.

Senator MALONE. I am talking about in the country.

We cannot do it in the country, but they can.

Mr. WILLISTON. There is a French market for coins in gold and bullion. I presume it is legal.

Senator MALONE. You would not know when you are talking of these foreign nations now especially dealing with us.

I will now, if the foreign dollar balances are converted, as they could well be very quickly on demand here, do you know it would only leave us about $5½ billion in gold?

Mr. WILLISTON. As I recall, it was 16 billion 2 against 22 billion 7. That is 5½ billion.

I think that is the figure you gave. There is another point, Senator, as I understand there are $25 billion in curb and stock market securities held by foreign owners which could be converted to short-term demand and transferred to foreign governments overnight.

If you wanted to add that to the 16 billion demand it comes to a very fancy forty-odd billion dollars which is twice the Fort Knox reserve.

Senator MALONE. Without considering the last part of it, which we might determine in the Senate Finance Committee, when we have our continued hearings, it does not leave us in a very good position so far as the gold market is concerned in any case.

Mr. WILLISTON. No, we have no gold on deposit free of foreign request to back our currency.

Senator MALONE. That is right. It came out in my questioning of Secretary Humphrey and Mr. Martin, Chairman of the Federal Reserve Board.

Now, that may be Russia's secret weapon. You know they have taught us now for 24 years that gold is just in your way. But Russia has a lot of gold and they are mining it very fast.

I was there in 1955 and traveled 14,000 miles in the country. It could well be, could it not, that foreign nations suddenly might demand this gold and everybody go on a gold standard but us.

Mr. WILLISTON. They can have it any time they want it.

Here is one other point. You have not brought it out specifically. The citizen of the United States is restricted to a currency dollar that is worth 30 cents, in mining at least.

Senator MALONE. I think you are right.

Mr. WILLISTON. On the other hand, the foreign mine operator can, if he wishes, take gold from Fort Knox through his Government at the old price of 20 years ago. So the foreign miner has, you might say, the advantage of a dollar that is worth a dollar, while the United States miner has the advantage of a dollar that is worth 30 cents.

Twenty years ago, 1938, it would have been $35 an ounce. Now, the foreign miner can exchange his currency and still buy gold at $35 an ounce. We cannot. He has the same basis for his export to the United States of the dollar of 20 years ago while we are limited to the depreciated dollar of today.

Senator BARRETT. Mr. Chairman, will the Senator yield to me? I would like to get straight on just one point.

The CHAIRMAN. Senator Barrett, do you wish to ask a question?

Senator BARRETT. I want to ask about the rights of a foreign miner. Do I understand that an individual citizen of foreign birth can come over here and buy gold, himself?

Mr. WILLISTON. Only by acting through his government, but most foreign nations have an exchange control of some factor or another.

A foreign miner can transfer his request for United States currency to his government. The government can take gold for it.

In many of the small countries the miner can, I would imagine, get the gold from his government. But any foreign government can have gold on demand at $35 an ounce. All they have to have is the dollar exchange for it.

Senator BARRETT. If that is true, it seems to me where gold is selling for above $35 an ounce and it has sold for much higher than $35 an ounce, it looks to me like they could liquidate our stockpile of gold pretty fast and sell it at a profit.

Mr. WILLISTON. If you will look back over the last 20 years you will find out that whenever the foreign gold market was high and large, where there was a considerable amount moving at those higher points, the withdrawal from the United States Treasury for so-called industrial use in this country, skyrocketed.

When it was a fairly uniform $35 price over the world and it can be fairly well fixed by our own Government because they buy and sell it, under those conditions the drain from the Treasury does fall off.

Senator BARRETT. Do these people have an absolute right to that, to take this gold out of here, or is that left to the Federal Reserve Board or the Secretary of the Treasury?

Mr. WILLISTON. The foreign governments are promised—I am not a gold man; I am talking out of my field—but under the Bretton Woods Agreement, as I recall, they are entitled to have their gold whenever the foreign governments ask for it.

Senator BARRETT. What are the restrictions on silver?

Senator MALONE. If I might answer that for you, the testimony shows—both Secretary of the Treasury Humphrey and Mr. Martin, Chairman of the Federal Reserve Board—that they can refuse to pay the gold at any time they want to do that, but they further testified that it would deteriorate our money on the open market terrifically and the open market abroad and probably cause a severe depression here immediately.

Mr. WILLISTON. It would, in effect, mean going off the gold standard if we refused to sell gold at that price.

Senator MALONE. We are off it now.

Mr. WILLISTON. That is internationally.

Senator ANDERSON. Could you give us the source of that 30-percent figure you used a moment ago. Just give us the place where you got that 30-cent figure because I never heard it used before and I do not believe it is correct.

You said compared to 20 years ago our dollar is down to 30 percent.

Mr. WILLISTON. The figure on the value of the present currency to the miner is a 33-cent dollar.

Senator ANDERSON. Wait a minute. The miner is not the only person in the economy. Try to give me where it got down to 30 percent.

Mr. WILLISTON. That figure I used I get from the mining industry and is a minimum direct cost in mining costs in the last 20 years.

Senator ANDERSON. Give me the authority for it at a later time. Then you said the reason why this condition existed was that the monetary managers are ashamed to admit the depreciation of the dollar.

Will you explain that a little bit?

Mr. WILLISTON. According to United States Government statistics our dollar is worth 48 cents compared to what it was worth 10 years ago. That is the 1949 dollar. Those are the average figures.

In other words, they include utilities where a dollar is still worth a dollar and they include automobiles where, for example, you could buy a Chevrolet for $800 in 1940 and you now pay $3,000 for it.

So the 48-cent figure is an average with no changes and more than 50 percent depreciated. It is an average.

Now, that is the admitted depreciation of the dollar, but gold was $35 an ounce since back in the middle thirties and gold is still $35.

Senator ANDERSON. I am looking for the part of the Constitution that says Congress shall have charge of the coinage of money and regulate the value thereof:

> To coin money, regulate the value thereof, and of foreign coin, and fix the standards of weights and measures.

Which member of Congress do you think is ashamed to admit the depreciation of the dollar?

Mr. WILLISTON. That power was delegated to President Roosevelt in the thirties. He changed the price of gold from $22 an ounce to $35.

That power ran out and reverted to Congress. Congress has not delegated it to anybody else.

Senator ANDERSON. So it is the monetary manager?

Mr. WILLISTON. Yes.

Senator ANDERSON. I just wanted you to specify.

Mr. WILLISTON. The same question has come up in the Treasury Department. There have been requests before Congress to change the value. Congress has had bills, but the Treasury has uniformly said no, they would be opposed to such things.

Senator ANDERSON. The managers of the currency, the monetary managers, are the Members of the Congress of the United States. I want you to go through and list the people who are ashamed to admit the depreciation of the dollar.

Mr. WILLISTON. The Congress is not. I think they are quite honest in measuring it, but on the other hand, the Treasury Department and the Federal Reserve bank certainly have a great deal to do with the management of the currency in the United States.

They can expand it or contract it at their will. Congress delegated that power to the Federal Reserve bank as far as the amount of currency in circulation.

Senator ANDERSON. Then if it is not the Congress, is it the Secretary of the Treasury who is ashamed to admit this?

Mr. WILLISTON. I think he is ashamed to admit it.

Senator ANDERSON. You do not know that very well, do you?

Mr. WILLISTON. You ask him. If you will ask him whether the value of the dollar changed by 60 percent or 66⅔ percent, he will say "No." He will not admit that dollar is only worth one-half or two-thirds of what it was.

Senator ANDERSON. I do not know how we have got into this because I have seen Secretary Humphrey testify and I have heard the senior Senator from Nevada question him for a long, long time. I thought he very frankly admitted what had happened to the dollar.

Mr. WILLISTON. Why do we not have gold to correspond to it?

Senator ANDERSON. That is another story. You said somebody is ashamed to admit something. It has to be the Congress or the Secretary of the Treasury.

Mr. WILLISTON. Candidly, I think it is the Secretary of the Treasury and the Federal Reserve bank if they admit publicly and dollar-wise——

Senator ANDERSON. You said the monetary managers are ashamed to admit the depreciation of the dollar. You tell me who?

Mr. WILLISTON. All right, I am saying, Senator, and you may not agree with me, but I think the Secretary of the Treasury and head of the Federal Reserve bank have much more to say about the management of the dollar than you do.

Senator ANDERSON. What does that have to do with whether he is or is not ashamed?

Mr. WILLISTON. Why doesn't he change it, then?

Senator ANDERSON. Do not ask me the question. I ask you the questions.

Mr. WILLISTON. I said I thought he was ashamed.

Senator ANDERSON. I hate these long characterizations of people. I think Bob Anderson is an honorable man.

Mr. WILLISTON. So do I.

Senator ANDERSON. You could not have. Here is a man you say is ashamed to admit the depreciation of the dollar. That first applied to all Members of the Congress. I wanted to see why you characterized me, Senator Bible, or Senator Malone that way.

Now you say it is the Secretary of the Treasury. I do not think he is ashamed to admit the depreciation of the dollar. They do it all the time in reports to the committees.

Do you believe they are deceiving the Congress?

Mr. WILLISTON. I would say this: We have, in my mind, only one or two true measurements of value. One of them is the value of 1 day's common labor or its nearest parallel, which is 1 ounce of gold.

Now, the country has taken the right to own gold away from citizens and they have kept it away from them for 20 years.

Senator ANDERSON. Did they do it legally?

Mr. WILLISTON. They did it by act of Congress, yes. But they took it away from their citizens.

Now, they in effect hid the value, the only measurement of value that has stood up from history, from their citizens.

Senator ANDERSON. Do you object to it?

Mr. WILLISTON. I do, because that is the only way it is possible to do as the kings of old did when they clipped the coins.

Senator ANDERSON. The Supreme Court upheld what the Congress did.

Mr. WILLISTON. Yes.

Senator ANDERSON. You do not want to impeach the Supreme Court?

Mr. WILLISTON. I say a great many people had a great deal of thought when the Supreme Court said that the promise of the United

States Government to pay for bonds in coins of the present weight and fineness did not mean what we ordinary citizens thought.

Senator ANDERSON. But you do recognize that the Supreme Court had the final say?

Mr. WILLISTON. Yes. We don't have to agree wholeheartedly. We have to agree legally, we have to abide by it, but we have difficulties sometimes following their thinking.

Senator ANDERSON. I only get interested because it is hard enough to pass these bills through Congress without getting them tied up with a whole lot of assertions that people are ashamed to admit the depreciation of the dollar.

I do not think we are.

Mr. WILLISTON. We are saying internationally that our dollar is worth the same as it was 20 years ago, $35 an ounce for gold. That is what we tell the international world, that the dollar, that gold is worth $35 an ounce in our money.

Yet we admit quite frankly within the United States that it is worth a half or possibly a third of what it was.

Senator ANDERSON. You say we do admit frankly and then you say we are ashamed to admit.

Mr. WILLISTON. Internal depreciation of the currency, but he won't admit it by revaluing gold.

Senator BARRETT. Mr. Chairman, I would like to ask, supposing these restrictions were lifted and any citizen could buy gold for $35 an ounce, what would happen?

Mr. WILLISTON. I would imagine there would be a run on the gold reserves of the United States because people think that gold is worth more than $35.

Senator BARRETT. They would exhaust the supply in Kentucky.

Mr. WILLISTON. Yes.

Senator BARRETT. What would happen to the country?

Mr. WILLISTON. The country would be in difficulties. But if this had been done before, if as depreciation of the currency went up, the value of the gold had been changed there would have been no demand.

If you offer gold to the citizens of the United States at $105 an ounce, they would not buy it. What the true value is, I do not know. I know it is worth a great deal more than $35. It may not be worth $105. Somewhere in between is probably the true point.

Senator BARRETT. Before the gold would be offered the price would have to be raised to realistic valuation?

Mr. WILLISTON. Or offered in relatively small amounts and determine it in the open market.

Senator BARRETT. Why are we not producing more gold?

Mr. WILLISTON. Because it is impossible to produce gold at the present time at $35 an ounce. To the best of my information there are not more than two appreciable mines.

Senator BARRETT. How much more gold would be produced if the value were raised to, say, the average of the world market or something on that order?

Mr. WILLISTON. The present world market does not mean too much because we stabilize the world market. It is fairly easy to say that with the mining dollar—I am talking about now the mining costs now being at least three times what they were in 1940—if we had $105

an ounce valuation we would have about the same amount of mining that we had in 1940, possibly a little bit less. $105 would activate the mines of the country.

But labor costs in mining have gone from 57 cents an hour in 1938 to $2.60 an hour now. Mining costs are roughly 50 percent of underground gold cost, labor.

Senator BARRETT. If we offered $60 an ounce we would get a lot of gold from all over the world.

Mr. WILLISTON. I don't know; I doubt it.

Senator BARRETT. I agree with your thesis. The reason there is not any more gold mined is because we cannot do it at $35 an ounce. I do not think the answer would be to permit people to take all the gold out of the vaults of Kentucky and let the country go to the dogs. That is the only bad feature about it.

Mr. WILLISTON. Here is another suggestion along this line: I do not know whether I am taking up Mr. Conover's time on another subject, but if our imports increase and our exports fall off, we are going to lose our reserve at Fort Knox anyhow.

Senator BARRETT. Certainly. I do not think it was ever intended for individuals to take that gold. Maybe that is the way it works out.

Mr. WILLISTON. If they do take it, or if the Government refuses to give it to them, in either case we are off the gold standard.

Senator MALONE. Mr. Chairman, I might just ask one question more.

If we had a free market for gold so that you could buy it and sell it, would that slow down the run on gold?

In other words, they might go get it for $35 from the Government, but if it is a free market for gold it might go to $75 or $50 and wherever it was stabilized that would be it.

Mr. WILLISTON. It has to be determined in the long run in the free market.

Senator MALONE. But in the free market it would soon find its level.

Mr. WILLISTON. Yes.

Senator MALONE. That was the purpose of Senate bill 1775 that I introduced last year, and is still in this session of Congress, also a second bill I introduced to go on the gold standard definitely after the price had been determined, or stabilized.

I do not know the answer, but I thought those two bills might find it.

Mr. WILLISTON. I think the safe thing to say is that $35 is not the proper value. We don't know what it is, but it is something higher than that.

Senator MALONE. If you could buy and sell it for whatever the people thought it was worth it would soon stop the $35 price for gold.

The CHAIRMAN. Do we not have treaties with many foreign countries which would prohibit us from raising the price of gold more than 5 percent?

Mr. WILLISTON. I don't know. As I said, I don't pretend to be a gold expert.

The CHAIRMAN. I understand there is such an agreement.

Mr. WILLISTON. On the other hand, as the Senator said, the Congress has the right to set the value of the currency. I don't think the Congress can be bound forever by a foreign treaty.

Senator ANDERSON. The only reason I said what I said a moment ago is that I have been on both sides of the table. I am always upset when people start talking in loose characterizations of public servants

as if they were all dishonest and crooked. I do not believe they are. I have known Bob Anderson a long time. I think he is an upright and honorable man. I think he did his very best in the Defense Department. I think he is doing very well in the Treasury Department.

I may not always agree with him, but I do not believe he is practicing deceit on the American Congress, neither do I believe that Congress is practicing deceit on the American public.

I think they are both ready to admit depreciation of the American dollar.

Mr. WILLISTON. Gold has been left alone, the currency is depreciating. They have never been brought into balance. It would be most inconvenient for the Treasury Department or the Federal Reserve Bank to have to sit down and think, well, now, we do not really honestly value gold so that we have a direct representation between our dollar and the value of gold. It would be embarrassing to them. I think they have avoided consideration of that because of that. The Republican national platform and Democratic platform advocated return to the gold standard, but the answer you will hear from the Treasury Department is "We would like to do it, but the time is never now."

The CHAIRMAN. I would like to continue the hearing.

Mr. CONOVER. Mr. Chairman, I want to make this comment first. I want to say that I fully share Senator Anderson's high opinion of Bob Anderson. I have known him for some years. I think there is no higher type of public official. I think the same of former Secretary George Humphrey.

Senator MALONE. You might say, Mr. Chairman, neither one started this business. They each took it over when it looked very bad.

As a matter of fact, it may look bad for some time. I certainly join in recommending the character of both of these men. I think they are both of high character and they would not lie to anybody.

Mr. CONOVER (continuing). To continue with the recommendations for future Government action in this field, we urge that—

2. To provide a sound basis for our currency, the Treasury be required to purchase all newly mined domestic gold and silver tendered by producers.

3. To preserve and improve the backing of our currency, all present stocks and future acquisitions of gold and silver be utilized by the Treasury for monetary purposes only, and that neither metal be sold by the Treasury for industrial uses.

4. To assist the mining industry to combat the effects of inflated costs and reduced metal prices, the seigniorage charge imposed by the Treasury on its purchases of newly mined domestic silver be substantially reduced or removed.

5. Congress fix the ratio at which the dollar and gold are to be made fully convertible and determine other technical procedures involved in the restoration of the gold standard, after receiving the recommendation of a Commission of its creation, to which men skilled in appraisal of the world's potential gold supplies as well as men of competence in domestic and international finance and trade should be appointed by designated Government authorities.

6. The administration recognize the historical and traditional attachment to gold and silver money throughout the world and, as a part of its foreign policy, aid and encourage other governments in

restoring gold and silver coinage as a circulating medium, as a standard of value, and as a form of conserving intrinsic wealth.

We particularly urge that our recommendations (1), (2), (3), and (4) be made effective promptly. Also, in line with our fifth recommendation, we urge approval of Senate Joint Resolution 16, introduced by the chairman of this committee, which would create a joint congressional-private citizen committee to make a full study of the gold problem and recommend further legislation needed "to reestablish, as an integral part of the American economy, the production of gold in the United States."

A major problem of the solids fuels industry arises from excessive imports of residual fuel oil, principally from Venezuela. These imports displace substantial tonnages of coal in its natural markets along the eastern seaboard.

Since residual fuel oil is a waste product, its price is not determined by conditions of supply and demand. At times when there has been a world shortage of oil, the price of residual oil has been raised several dollars a ton above the coal equivalent. On the other hand, the price can be and has been dropped substantially below the coal equivalent when necessary to take the market. This raises havoc with the coal industry, which must either drop its price—frequently below the cost of production—in order to hold the market, or else endeavor to maintain a fair price and let residual oil take whatever volume of business it chooses.

Although residual oil is sold principally on the eastern seaboard, coal producers cannot meet its competition in this area without also reducing their prices to inland customers—thus lowering the price structure for the entire coal industry throughout the United States. Since coal's profit margin rarely exceeds 25 cents per ton, the effect can be disastrous. The displacement of coal tonnage by residual oil runs into many millions of tons each year—with resultant widespread distress and unemployment not only in the coal industry but also in the railroad industry which depends upon coal for such a large part of its traffic.

The President's Advisory Committee on Energy Supplies and Resources Policy, in its February 26, 1955, report, recommended that imports of crude and residual oils be held to the proportions that such imports bore to the production of domestic crude oil in 1954. We believe the time has come to make that recommendation effective through legislation.

Another important step which we believe should be undertaken to strengthen the coal industry is the establishment of a broad program of coal research, with Government-industry cooperation. Coal has always been and must continue to be our major energy source. In every emergency coal has been called upon to meet most of the tremendously expanded energy requirements for defense and for the maintenance of our civilian economy. The President's Advisory Committee, referred to above, accordingly emphasized the need of maintaining adequate solid fuels productive capacity at all times, and it is generally agreed that this calls for an annual coal production of 500 million tons.

Hearing before a House Interior subcommittee last year brought out the need of substantially expanded research to develop new

and more effective uses for coal, to improve and expand present uses, and to reduce the cost of coal production and distribution. The subcommittee report stated that a broad program of this sort would produce results—

> highly beneficial to the coal-mining industry, to consumers of coal, to coal-mining workers, to distressed coal-mining communities, and to the general public—

and would enhance the economy and security of the United States; and that accordingly—

> it would be in the national interest for the Federal Government to undertake the financing and management of such a program without delay.

This program would not involve a large additional Federal organization, but would be conducted through existing facilities of the Bureau of Mines, universities, private research institutions, and industrial organizations. We agree with the subcommittee's conclusions and endorse pending legislation to establish such a program.

As to mine taxation, I have already spoken of the need for full deductibility of exploration expenditures.

We fully recognize that tax relief is of little value unless a mine can obtain a price for its product that enables it to operate and make a profit. We also recognize that the finding and development of new ore bodies is not worthwhile if the potential market for their product is preempted by low-cost foreign competition.

Nevertheless, the tax provisions applicable to mining—and the encouragement or discouragement which they give to the finding and development of additional ore bodies and new mines—are of great importance as part of an overall long-range mineral policy.

The essence of mining is that it is a "wasting asset" industry, in which new reserves must constantly be developed to take the place of those that are mined out. We are not a have-not nation in mineral resources, but we can become one unless we adopt policies that will maintain a healthy, going mining industry and furnish the incentive for it to carry on long-range exploration and development work. For this purpose tax policies that recognize the special conditions and hazards of the mining industry are of the highest importance.

This year we have again presented recommendations for tax revision to the Ways and Means and Finance Committees. Some of these are of a technical nature and I will not discuss them at this time.

I should like to leave one thought with you, however, and that is that our country could very advantageously adopt a provision such as has been in effect in Canada for some years, under which new mines are exempt from taxation for a period of 3 years after the beginning of commercial operations. This has done much to develop Canada's mining industry and to create new wealth, new sources of employment, and new tax revenues which would not otherwise exist. It encourages venture capital to take the risks of mining development, knowing that if it succeeds in finding and opening up a property there will be a better chance of returning the investment. As part of a long-range mineral policy, an exemption for new mines should have similar results in this country.

Before concluding, we should also like to suggest the desirability of reestablishing a National Minerals Advisory Council to the Department of the Interior, and a similar industry advisory body to the Office

of Defense Mobilization. We suggest this be done by legislation, spelling out the authority and duties of the councils.

Such advisory councils, composed of mining men representative of the various branches of the industry, could render a valuable service to the agencies of Government primarily concerned with mineral policies. The establishment of such councils would implement a further recommendation of the Cabinet Committee on Minerals Policy, which called for "some workable body" to maintain "the contacts between the mining industry and Government necessary to give force and effect" to national mineral policies. The councils could be available for consultation and advice both to the Government agencies and to the committees of Congress, and could bring to bear the knowledge and experience of mining men well qualified to aid in developing and administering mineral policies in the national interest.

We appreciate very much the opportunity to appear before you today. The mining industry is heartened by the efforts which your committee is making to develop sound and constructive mineral policies.

Thank you very much.

The CHAIRMAN. Thank you very much for your very able statement. I am sure it will be of great value to this committee.

Senator Dworshak, I believe you would like to comment.

Senator DWORSHAK. Mr. Conover, I want to endorse heartily your comment which appears on page 9 of your prepared statement:

> Consideration might be given, however, to limited stockpile purchases of certain strategic minerals from domestic sources as a means of maintaining a nucleus of domestic production as part of our mobilization base.

Prior to this public hearing this committee held about an hour's hearing this morning at which time testimony was given by Mr. John S. Patterson, Deputy Director of the Office of Defense Mobilization, and one of his assistants and the chief counsel.

I think probably the reason for taking more time than was originally anticipated at that executive session was that apparently there is not general awareness now of the fact that for several years contracts have been negotiated by our Government for the acquisition of minerals abroad at higher prices than prevailing market levels.

I called attention to the fact that antimony has gone down the drain, there is no primary production in this country.

Cobalt is following the same procedure, and I think that the American Mining Congress can render outstanding service if it will take a consistent and firm stand that it is not necessary only to stockpile these strategic minerals because we recognize that they can be depleted in time of war, but I want to emphasize again your comment that we ought to encourage and stimulate the development of sources in the United States of production of these very important and vital minerals because unless we do that and unless we can give some semblance of equity and fairness to our domestic producers as compared to the high prices which are paid by our Government for minerals, then obviously the domestic mining industry will continue to disintegrate.

I certainly hope that your Mining Congress will reemphasize the need of developing these sources of minerals.

Mr. CONOVER. Thank you, Senator Dworshak. I think we can assure you that we shall do so.

It has been consistently our position that stockpiling should be directed first to domestic minerals, where they are available, and that we must consider not only the stockpile aboveground, but one of the most important parts of our stockpile is the fact that we have a going domestic mineral industry which can be expanded when necessary.

That is a definite and extremely important part of our overall stockpiling program.

Senator DWORSHAK. In the case of cobalt it is not necessary to ignore what domestic sources are available and encourage the mining in Cuba or in Africa of cobalt, with complete disregard for the price equation.

We cannot justify reliance upon these foreign sources for these foreign minerals.

You agree with that?

Mr. CONOVER. We should definitely encourage the development of our own mining industry and it should have the benefit of stockpile purchases to the maximum extent.

Senator DWORSHAK. Certainly we are not involving the element of a subsidy because the record shows and this committee has demanded that ODM furnish us information, some of which may be classified, indicating to what extent higher prices have been paid by our Government for these foreign minerals and for comparable minerals produced here within the United States.

So in no way are we implying, at least I am not, that a subsidy is involved, although there may be a defensible case made in support of that policy, also.

Senator MALONE. The President of the United States can now regulate import quotas on oil, residual oil, can he not?

Mr. CONOVER. The power that you are speaking of is under section 7 of the Trade Agreements Act.

Senator MALONE. If he wants to do it he can do it.

Mr. CONOVER. It can be done either on a voluntary basis as has been tried so far and has not been too successful.

Senator MALONE. The President can do it if he wants to.

Mr. CONOVER. That is true.

Senator MALONE. That is what I wanted in the record.

You agree that he can?

Mr. CONOVER. He has that authority.

Senator MALONE. But it has not been successful?

Mr. CONOVER. I would agree with that.

Senator MALONE. That is all.

Senator BARRETT. Mr. Conover, Canada gives relief from taxation for a period of 3 years for new mine development. Is that as to income taxes or property taxes?

Mr. CONOVER. I was speaking there of the Dominion Government on its income tax. I do not know of any exemption on property taxes within the Provinces.

Senator BARRETT. It is as to income?

Mr. CONOVER. As to income from the property.

Senator BARRETT. Does that go to all minerals?

Mr. CONOVER. It has been broadened recently. It applied to metalliferous mines to begin with and did not include bedded deposits. There has been a change in the law. I don't know how much broader it is.

The principle has been extended to some extent.

Senator BARRETT. Do they cover uranium at the present time?

Mr. CONOVER. Uranium comes under the heading of a metalliferous deposit.

The CHAIRMAN. If there are no other questions, the committee will be in recess until 10 a. m. tomorrow.

(Thereupon, at 12:05 p. m., the subcommittee was recessed, to reconvene at 10 a. m., Tuesday, March 25, 1958.)

LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

TUESDAY, MARCH 25, 1958

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS, OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in room 224, Senate Office Building, Hon. James E. Murray (chairman) presiding.

Present: Senators Murray, Malone, Bible, and Carroll.

Present also: Senators Church, Watkins, and Allott.

Staff members present: Robert W. Redwine, assistant counsel to the committee, and George B. Holderer, staff engineer.

The CHAIRMAN. The hearing will come to order.

This is a continuation of the hearings which started March 24.

Mr. Frederick H. Mueller, Assistant Secretary for Domestic Affairs, Department of Commerce, will be the first witness this morning.

Mr. REDWINE. Mr. Chairman, Senator Talmadge and a group of witnesses, whom he will introduce, is scheduled to appear at 11 o'clock. I believe that Mr. Mueller's testimony can be finished by that time.

May I suggest that you call that to the attention of any Senators who come, because we are working on a tight schedule?

The CHAIRMAN. Very well.

You may proceed, Mr. Mueller.

STATEMENT OF FREDERICK H. MUELLER, ASSISTANT SECRETARY FOR DOMESTIC AFFAIRS, DEPARTMENT OF COMMERCE

Mr. MUELLER. Mr. Chairman, prior to my appearance here this morning at the request of the staff and the members of your committee, I sent each and every member of your committee a table of the consumption and the estimated consumption of certain minerals and metals which I am prepared to discuss at this time.

Frankly, the tables which were submitted, speak for themselves as far as the consumption up to and including the calendar year 1957.

For 1958 and for 1959 we have estimated to the best of our ability what the demand for these specific minerals may be.

Naturally, those estimates are based on factors and judgment on the part of the people from industry, experts in the field on these particular items, and while I just want you to know, sir, that they are estimates, they are arrived at after weighing what we consider all the factors that are pertinent.

Outside of that, at the present time, I have no further comment to make. I shall be very glad to answer any questions.

The CHAIRMAN. The exhibit that you submitted will be inserted in the record at this point.

Mr. MUELLER. Thank you, sir.

(The exhibit referred to is as follows:)

U. S. DEPARTMENT OF COMMERCE

Consumption and estimated consumption of certain minerals and metals (1954–59)

Item	Unit	1954	1955	1956	1957	1958 (estimate)	1959 (estimate)
Antimony:							
Primary	Short tons	12,180	12,472	12,897	10,400	10,000	12,000
Secondary	do	22,358	23,702	24,106	23,000	22,700	23,500
Barite	do	1,215,678	1,459,671	2,062,076	1,800,000	1,750,000	1,700,000
Bauxite (for aluminum)	Long tons	5,460,000	5,830,500	6,582,600	6,400,000	6,600,000	7,800,000
Boron minerals and compounds (apparent consumption)	Short tons	584,835	702,480	701,252	702,000	750,000	830,000
Chrome ore:							
Metallurgical grade	do	502,278	993,653	1,211,914	1,177,073	900,000	1,100,000
Refractory grade	do	278,324	431,407	474,562	434,922	350,000	430,000
Chemical grade	do	133,370	158,923	160,124	148,474	135,000	145,000
Cobalt	Pounds	7,350,000	9,740,000	9,562,000	9,157,000	8,700,000	9,100,000
Copper:							
Refined copper only	Short tons	1,275,000	1,537,000	1,557,000	1,368,000	1,380,000	1,460,000
Refined copper plus base scrap	do	2,059,000	2,419,000	2,367,000	2,108,000	2,118,000	2,260,000
Fluorspar:							
Acid grade	do	225,096	248,218	289,523	328,000	350,000	375,000
Metallurgical grade	do	208,085	267,144	290,773	291,000	280,000	290,000
Gypsum, crude (based on production plus imports)	Thousand short tons.	12,364	14,650	14,539	13,370	13,500	(1)
Iron ore	Long tons	94,229,000	125,028,000	125,171,000	130,602,000	106,000,000	129,000,000
Magnesium:							
Primary	Short tons	39,218	46,463	53,610	46,000	40,000	50,000
Secondary	do	8,250	10,246	10,529	9,500	8,500	10,000
Manganese (metallurgical grade)	Short tons	1,678,000	2,046,000	2,199,000	2,270,000	1,900,000	2,200,000
Mercury	76-pound flask	42,796	57,185	54,143	52,400	52,000	54,000
Mica:							
Strategic quality	Short tons	4,200	5,560	5,340	5,500	5,450	5,550
Nonstrategic quality	do	83,800	102,800	89,800	86,400	85,500	86,500
Molybdenum (metal content)	Pounds	24,710,000	38,799,000	42,652,000	38,956,000	36,000,000	38,000,000
Nickel	Short tons	94,733	110,100	127,578	124,000	115,000	140,000
Phosphate rock (apparent consumption)	Long tons	10,887,264	11,120,206	11,535,850	11,700,000	11,700,000	11,900,000
Potash salts (apparent consumption)	Short tons	3,377,850	3,531,256	3,507,802	3,520,000	3,450,000	3,520,000
Sulfur (apparent consumption)	Long tons	4,912,600	5,625,400	5,735,400	5,428,800	5,350,000	5,750,000
Tin (primary) Alaska contract price	do	54,430	59,830	60,470	54,700	54,000	60,000
Tungsten concentrates (metal content)	Pound	4,037,000	8,967,000	9,061,000	8,547,000	8,000,000	8,500,000

[1] Not available.

NOTE.—Many of the consumption figures for 1957 must be considered as preliminary

Sources: Bureau of Mines, U. S. Department of Interior; Business and Defense Services Administration, U. S. Department of Commerce. Industry Reports.

The CHAIRMAN. You have no prepared statement?

Mr. MUELLER. I have no further statement to make. I have presented the figures which was what I was asked to do.

Mr. REDWINE. Mr. Chairman, may I ask a question or two?

The CHAIRMAN. Yes, you may.

Mr. REDWINE. Mr. Mueller, a rapid examination of this chart would indicate that it is estimated that the 1959 level of consumption will approximate that in most instances of 1957; is that correct?

Mr. MUELLER. That is right, sir.

Mr. REDWINE. Not exactly, but very close.

Mr. MUELLER. Well, as I said in my opening statement, it is a matter of judgment and I believe the considered judgment of almost anyone with respect to our economy is that by 1959 we should have at least attained the same level of production that we did in 1957.

Mr. REDWINE. Mr. Mueller, how firm is the department in its belief that the estimates for 1958 will stand up?

Mr. MUELLER. You know, it is very difficult to answer that question except to say that I have personally gone over each and every one of these things and the background information. It is based primarily on the fact that at the present time we are in a period in our economy when possibly in basic materials of this kind the consumption will probably be off 10 percent or more, on the average.

Mr. REDWINE. Mr. Mueller, are these estimates based on the assumption that the low point is reach in the present depression or recession or reduced productivity period we are in, whatever you may choose to call it?

Mr. MUELLER. Well, let us say they are based on the opinion that during the first part, and possibly the middle, of the year, we will be at a reduced rate and that the pickup will occur sometime during the calendar year.

Mr. REDWINE. Mr. Chairman, I have no further questions.

The CHAIRMAN. Your assumption is that we are at the bottom of the slump now and that things from now on are going to be greatly improved?

Mr. MUELLER. No, I cannot quite say that I go along with that, sir. I feel that we may continue for a while at the level of present production.

The CHAIRMAN. When you say for a while, what do you mean?

Mr. MUELLER. I am not trying to weasel, but I would say until the middle of the summer.

The CHAIRMAN. The middle of this coming summer?

Mr. MUELLER. That is my best considered judgment, but it must be considered that anybody who sticks their neck out under present conditions is making an estimate purely based on factors that he feels are controlling.

The CHAIRMAN. It is largely influenced by hope, too, is it not?

Mr. MUELLER. No, I think basically our economy is fundamentally sound. I do not think that we have the factors in our economy that heretofore have caused a continuous situation such as is before us today.

Our financial situation is strong; our inventory position is not overextended.

As a matter of fact, it is being reduced.

I could cite almost innumerable factors that in my opinion, weighed together, make the statement that I have made plausible to me and I am not putting it out as a Pollyannish estimate.

The CHAIRMAN. Are there any other questions?

Mr. REDWINE. I have none, sir.

The CHAIRMAN. Senator Bible?

Senator BIBLE. I am sorry, Mr. Chairman, but I came in very late and I did not hear Mr. Mueller's testimony. I have no questions.

The CHAIRMAN. Will you repeat very briefly what the assumption is that you are making here with reference to the improved conditions of the economy?

Mr. MUELLER. In the first place, sir, the tables which we have submitted show the actual consumption for years up to the middle of 1957 and estimate for 1958 and 1959.

Now, our estimate for 1958 is at a reduced level from, naturally, 1956 and 1957, and it is based on an average, we might say, of approximately 10 percent below normal basic consumption of basic materials.

With the estimate that during this year probably by the middle of the summer we will have started up on an upward climb, but we still for the overall year 1958 it will probably average approximately 10 percent below.

Senator BIBLE. However, you do not share that same view for 1959?

Mr. MUELLER. By 1959 we feel we will have again regained at least the level of 1957.

Senator BIBLE. I notice you reflect that in manganese and you reflect that in tungsten and you reflect that in molybdenum and many other of the metals that are listed here.

Mr. MUELLER. Yes, sir.

Senator BIBLE. Thank you.

I have no further questions.

The CHAIRMAN. Thank you very much.

Senator Talmadge is here this morning. We will ask Senator Talmadge to come forward and introduce his witnesses.

STATEMENT OF HON. HERMAN E. TALMADGE, A UNITED STATES SENATOR FROM THE STATE OF GEORGIA

Senator TALMADGE. Thank you, Mr. Chairman.

Mr. Chairman, I wish to express to you and the committee my deep gratitude for affording this opportunity for interested parties to appear in support of my bill, S. 2077.

(S. 2077 is as follows:)

[S. 2077, 85th Cong., 1st sess.]

A BILL To direct the Secretary of the Department of the Interior to undertake a survey in order to assist in promoting the production of concentrated iron ore and steel in the southern Appalachians area

Whereas the production of steel and related products are, and will be essential to the defense and the economy of our Nation; and

Whereas there is an abundance of iron ore in the southern Appalachians particularly in the beds known as the Clinton sedimentary iron-ore beds occurring in the States of Georgia, Alabama, Tennessee, North Carolina, and South Carolina and in associated deposits; and

Whereas there are extensive deposits of bituminous fuels in the States of Georgia, Alabama, Tennessee, North Carolina, and South Carolina adjacent to

the Clinton beds, which are essential not only to the future recovery and concentration of low-grade steel in such States, and possibly elsewhere, but also for other purposes related to the defense and economy of the Nation; and

Whereas the transportation facilities afforded by the Tennessee River waterway, the Coosa-Warrior River waterway, the Alabama-Tombigbee River waterway, the Apalachicola-Chattahoochee-Flint River waterway, the Savannah River waterway, and the contiguous railways of the area will promote a tremendous expansion for industries aiding the economy and national defense of this Nation; and

Whereas the coordination of production and transportation facilities must be generated by effective surveys and studies tending to develop groupings of various industries in the coordination of their common problems: Now, therefore,

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Department of the Interior is authorized and directed to conduct a survey, having national significance in the defense and economy of our country, for the purpose of determining ways and means of affirmatively encouraging the production of concentrated iron ore for steel, and its related products, from the sources of ore and fuel in and contiguous to the southern Appalachians area. The Secretary shall report the results of such survey to the Congress, and shall make such reports public, not later than one hundred and eighty days after the date of enactment of this Act.

This measure is one which I offered for myself and the Senators from Georgia—Mr. Russell; Alabama, Mr. Hill and Mr. Sparkman; South Carolina, Mr. Johnston and Mr. Thurmond; North Carolina, Mr. Scott and Mr. Ervin, and Tennessee, Mr. Kefauver.

Essentially, it would direct the Department of the Interior to undertake a survey to determine the extent of iron ore deposits in the Southeast and the means through which those deposits can be utilized effectively for the production of steel.

It provides for a report of findings within 180 days of enactment.

For some years now economists, industrialists, and defense planners have been concerned about the rapid depletion of the country's traditional sources of iron ore. Already many users have been forced to turn to other sources of supply, notably those in South America.

As a matter of prudence and preparedness, it would seem to me that this situation should behoove the United States to search out all available sources of iron ore here at home. This should be done to insure against any unhappy circumstance which in the future might deny us our foreign supplies as well as to assure readily available reserves which could be tapped immediately in any emergency.

It is well known among geologists that there is an abundance of iron ore in the southern Appalachians. In my own State of Georgia, some very promising deposits have been discovered in the Webster County area just recently. There is reason to believe that even richer deposits abound in the area if only some means could be found to seek them out and utilize them.

I, of course, can speak only as a layman who is interested in promoting the economic welfare of his State and region and in maintaining the Nation's capacity for the production of steel in the amounts needed for both defense and civilian requirements.

However, I have invited three men who can testify as experts on this subject, and who are prepared to answer the technical questions of the committee about all the ramifications of S. 2077.

It is my happy privilege to present to the committee three of Georgia's most outstanding citizens: Dr. Merle C. Prunty, Jr., who is head of the department of geology and geography at the University of Georgia, and one of the most outstanding in the Nation; Capt.

Garland Peyton, director of the Georgia Department of Mines, Mining and Geology, who has been the director of our State department since the mind of man runneth to the contrary and he is well known in that regard throughout the Nation; and also Hon. Robert S. Lynch, chairman of the board of the Atlantic Steel Co. of Atlanta.

Mr. Lynch has been in steel all his life, not only in Georgia, but in other areas of the Nation and he is thoroughly familiar with the problems of getting the strategic iron ore supply and processing it into the final product.

These men are recognized authorities in their fields. Each of them has made significant contributions to the educational and economic advancement of Georgia, the Southeast, and the Nation. Each of them has given considerable study over a period of years to the subject matter of S. 2077.

It is my strong conviction, Mr. Chairman, that Federal Government, by assisting the Southeast to develop its vast potential in the mining of iron ore and the production of steel, can make a significant contribution toward maintaining the Nation's defenses as well as toward sustaining its economic growth.

I earnestly hope the committe will consider S. 2077 in that light and will, on that basis, report favorably on it.

The CHAIRMAN. Thank you, Senator Talmadge, for your very fine statement.

I am sure that iron ore can be found in many parts of the country. We have deposits in Montana.

As you point out, not only in the Southeast, but all over the country.

Senator TALMADGE. In many regions of our country.

Senator BIBLE. Mr. Chairman, might I just make a comment to Senator Talmadge's statement.

I am certainly sympathetic to this bill. I think the committee could hold out some real encouragement for you and your able witnesses.

The Secretary of the American Mining Association has just directed a telegram to me which I know will be of interest to you because I know your philosophy in these maters. He has wired me that the United States is considering a grant of $100 million to India to develop their iron mills, their loading facilities and railroads, so that they can develop their iron in that country.

I would think that the State of Georgia might share just as well, or, at least, have a chance of exploring and surveying your iron.

Senator TALMADGE. I certainly concur with you in that statement, Senator. If our Government can afford to contribute of our borrowed taxpayers' money $100 million to India for the same purpose, I think our own economy, our own area, and our own defense should come first.

Senator BIBLE. I certainly concur with you. I want to call that to your attention because I have heard you make a talk on foreign aid. I think that ICA now has a mission in India for effecting some type of loan of $100 million.

Senator TALMADGE. I appreciate that and our plea this time is for home aid.

Senator BIBLE. I could not agree with you more.

Senator TALMADGE. Thank you, sir.

Mr. REDWINE. Senator Talmadge, what order would you suggest that the three gentlemen should appear?

Senator TALMADGE. I think they have agreed among themselves that Dr. Prunty should testify first and following Dr. Prunty, Captain Peyton, and then following Captain Peyton, Mr. Lynch.

In that order you get the geography, our State Department, and then the man who produces the steel.

Thank you very much, gentlemen. I appreciate this opportunity.

The CHAIRMAN. Dr. Prunty, you may identify yourself for the record and proceed with your statement.

STATEMENT OF MERLE C. PRUNTY, JR., CHAIRMAN, DEPARTMENT OF GEOGRAPHY AND GEOLOGY, UNIVERSITY OF GEORGIA

Mr. PRUNTY. Mr. Chairman, my name is Merle Prunty, Jr. I am chairman of the department of geography and geology at the University of Georgia.

My purpose in this statement is an overall assessment of the implications for the national economy and defense inherent in this bill.

In my conclusions I wish to recommend certain modifications in the bill which will, in my opinion, enhance the possibilities of achieving its objectives.

I will be followed by Capt. Garland Peyton, distinguished veteran director of the Georgia State Department of Mines, Mining, and Geology, who will speak from a detailed knowledge of many of the ore bodies involved in this bill.

Captain Peyton will be followed by Mr. Robert S. Lynch, chairman of the board of Atlantic Steel Co., who will discuss certain industrial implications of this proposed legislation.

Since the close of World War II it has been common knowledge that the high-grade hematite iron ores of the Lake Superior district, particularly in the famous Mesabi iron range of Minnesota, were approaching exhaustion. This is not to say that immediate depletion of all high-grade ores in this area is imminent, but, rather, that the areas containing high-grade deposits within it are shrinking steadily, and that the proportion of our national iron-ore requirements which those deposits can be expected to furnish during the next decade will be dramatically smaller than what they have traditionally furnished.

During recent years the Lake Superior district has accounted for about 78 to 82 percent of our domestic iron-ore production, and this has consisted nearly entirely of high-grade hematite iron ore.

During the next decade the prospects are that production of hematites from this area will drop to half, or even less, of what it was as little as 5 years ago.

In anticipation of this well-known situation, the iron and steel industry and residents of the Lake Superior area, have taken several important steps.

First, nearly 35 years ago, research was started in Minnesota to discover means of recovering iron from taconites, and beneficiating it into utilizable ore.

For many years such work proceeded at the University of Minnesota.

The Bureau of Mines has studied taconites for more than two decades, and industry has participated through construction of expensive pilot plants to develop a taconite processing technology. These activities have been successful. Concentrated ore from taconites now moves to market from Lake Superior.

Hematite ores customarily contain 50 percent or more metallic iron and occur in relatively soft rock. They are, therefore, relatively easily and inexpensively handled, and their proportion of recoverable iron is high.

Taconites, on the other hand, are iron-bearing silicates. They are extremely hard, comparable to most granites. Their recoverable iron content is low, commonly 23 to 25 percent.

Mining taconites requires specialized, expensive machinery. After extraction, taconites must be subjected to crushing, pulverizing, magnetic separation of the recoverable iron, pelletizing and drying.

In other words, the cost of beneficiating iron from taconite up to a utilizable level is considerable.

The same applies to iron recovered from jasper, another common iron-bearing rock of the Lake Superior district which is equally hard to handle, but which through recently developed technology is now a potential iron source.

I am stressing here the complications, and attendant higher costs, in recovering iron from taconite and jasper to prepare for a point to be made later in connection with probable recovery costs of certain soft southern ores.

It is obvious that anything which contributes to higher production costs in the iron and steel industry contributes to higher prices for the myriad products made from steel, and steel tools. Anything which increases steel prices tends to increase price levels throughout our whole economy, simply because there is not material more fundamental to the material culture, the businesses, transportation systems, the agriculture, and homes of this Nation than is steel.

The second great move to meet impending iron ore shortages has been made largely by the steel industry. This is the development of foreign iron-ore sources.

Presently in the Ungava Peninsula and elsewhere along the Quebec-Labrador border more than 15 companies are doing exploration and development work. Several large deposits in this area are already in production.

A number of deposits in Ontario, north of Lake Superior, are in production.

Iron ore is now reaching the United States from Canada, Chile, Venezuela, Peru, Cuba, Brazil, Liberia, Sweden, Sierra Leone, and other sources.

Since 1948 imports of iron ore have increased more than 400 percent and now exceed 13 million tons of high-grade ore annually.

This is just a beginning, however. In the years ahead we can expect imported ores to provide progressively greater amounts of our raw iron. The development of the St. Lawrence seaway is based in part on the need for movement of foreign ores into our primary iron and steel manufacturing districts by cheap water transport.

The evolution of a technology to handle taconites, discovery and exploitation of foreign ore bodies, and development of the St. Lawrence seaway for oceangoing carriers have been vital steps in meeting, at least in part, future iron requirements of the Nation. These are steps that logically should have been taken.

Particularly the development of procedures for handling the low grade taconitic ores has been essential to the national defense in insuring iron within our borders for the future.

We commend to your attention any activity designed to strengthen our knowledge of these low-grade deposits as we would any measure to strengthen our defense potential and our national economy.

While these activities to meet impending ore shortages have proceeded, however, relatively soft, and, therefore, presumably less expensively recored, iron deposits in the southeastern region have been subjected to little recent study.

An intelligent guesstimate, from old surveys, is that the potential and available "soft" ores in the Southeast exceed 11 billion tons. Of this amount, over 2 billion tons probably consists of currently available ores, not merely potential ones.

During the period since 1948, when imports of foreign ores have increased more than 400 percent, the production of ores in the Southeast has merely fluctuated between 7 million and 8.5 million tons. It is, today, about 65 percent of the amount which we annually import, and occurs principally in the Birmingham area.

I believe that a major factor in the lack of development of the southeastern deposits to date is simply lack of adequate knowledge of them. Iron bearing deposits extend from the Birmingham district northeastward across northeast Alabama, northwest Georgia, and east and northeast Tennessee.

These deposits are know as the Clinton, or Rockwood beds. These Clinton beds contain, very probably, billions of tons of red, hematite-like deposits. I cannot satisfy myself that most of them have been thoroughly studied and explored.

The surface outcrops of these beds have been mapped and measured at many points, but at many others I am convinced they have not been checked at all, because I have seen outcrops of 12 to 15 feet in thickness in areas where no records of such exist.

Outside of the Birmingham area, practically no core drilling has been done in these beds to determine what they contain, how thick and rich they may be.

Existing scientific studies of them are, with a few exceptions, from 20 to 50 years old were conducted by geologists who did not have the technical skills and tools which today's geologists possess.

Further, and most important, the older studies were made in the light of industrial and national needs of decades ago, when depletion of the Mesabi hematites was not anticipated.

Even so, the existing studies have generally classed these deposits as "available deposits," and have indicated recoverable iron contents ranging from about 35 percent to 45 percent.

In addition to the Clinton beds, soft brown iron ores occur in west central and east central Georgia, in northwest Georgia and northeast Alabama, in western middle Tennessee and northwest Alabama.

These deposits also have been subjected to little recent detailed study, although among them are mining areas which have produced good quality ores for decades.

In western North and South Carolina there are magnetite iron ore bodies, whose locations are known, but which have not been thoroughly examined in recent years.

My opinion is that several factors justify detailed examination of these southeastern iron deposits.

1. Bituminous fuels for reducing ores are present in the region in good quality and quantity, and the transportation linkups afforded

by the developed waterways and railways of the area could provide assemblage of the necessary raw materials for smelting and reducing at any of several points.

The inland waterways of the Southeast are in considerable part already developed, as on the Tennessee and could provide the same function in assembling raw materials as the St. Lawrence will in connection with foreign ores.

2. A substantial shift to dependence upon foreign ores could leave us dangerously short of developed sources of domestic ores in time of national emergency.

If deposits of reasonable quality can be developed within our borders, in sufficient quantity to meet our minimum iron ore needs, we are in a better position strategically than if we depend upon millions of tons of seaborne ore.

3. Most of our iron and steel plants are concentrated in a few districts, for example: Gary-Hammond, Ind.; the Mahoning Valley; Cleveland; and others. They are clustered along and adjacent to the lower Great Lakes, particularly Lake Erie. It is not a widely dispersed industry although it is our most basic one.

It would seem highly desirable to promote dispersal of this industry, if for no other reason than that the survival of at least some of it is absolutely fundamental to the Nation's military effort in the event of a surprise attack in this rocket powered age.

4. The Southeast is expanding steadily as a manufacturing area and the long term iron and steel needs of the area are bound to respond accordingly.

Since 1929 the average per capita income in the Southeast has increased more than 400 percent, a rate of increase unsurpassed by any other large section of the Nation.

Today well over half of the regions population lives or works in towns and cities, an indication of the impact of recent industrialization.

Industries continue to spring up in the South mainly because of the increased market potential which increased per capita incomes have created. The iron and steel industry is responsive to this same factor, provided it can be shown that raw materials are at hand to permit it to respond.

5. Development of Southeastern iron deposits on even a moderate additional scale could have an important effect upon the prices of imported ores in the future.

Please recall that it is reasonable to presume a lower cost of extraction for the average soft ores of the South than for the hard, granite like taconitic ores of Lake Superior district.

What I am postulating here is a parallel with the situation which this Nation faced for many years in regard to supplies of crude rubber. Until we developed a synthetic rubber industry, we were largely at the mercy of British and Dutch rubber interests in Ceylon, Malaya, Java, and Sumatra, who could, because Uncle Sam produced no rubber, but was the world's biggest customer, approximate among themselves how much they would charge us for natural rubber.

Actually, through a succession of cartel agreements, just about this condition prevailed for many years. Today, however, when the price of natural rubber reaches a level somewhere around 25 or 26 cents per pound, our domestic synthetic rubber industry expands its

production accordingly, and, in consequence, the prices for imported natural rubber tend to fall back.

The long-term effect for the American consuming public is beneficial since the overall prices for crude rubbers do not rise to the levels they would if we had no domestic industry.

In the case or iron, we have no long-term assurances as to what sorts of royalties, export and inventory taxes may be assessed against ores moving from foreign sources to this Nation. We have no way of insuring that our foreign sources will not join together in some form of cartel to fix the prices of ores shipped to us.

Now are we immune to outright expropriation of ore deposits developed abroad by some American concern, as the petroleum industry can verify from its Mexican experiences.

To guard the public against the price ravages to which it could be subjected in such instances, and to stabilize the raw materials input of the steel industry itself to a reasonable degree, we need, over the decades, more relatively low extraction cost domestic ores than the taconitic-deposits apparently can provide.

6. Finally, I am not convinced that all, or even necessarily most, of the Southeastern ores are really low grade.

A few months ago a man from west central Georgia brought me some rocks that he thought were odd, and asked what they were. He had picked them up on the surface, in the woods, on a small farm. They were a type of limonitic iron ore containing about 57 percent metallic iron.

Captain Peyton can tell you of numbers of samples he has seen from the same area, each containing high proportions of iron.

All of us interested in these matters have seen such bits of evidence in sufficient amounts to cause us to become wary; there is enough evidence to justify thinking that what have been regarded as low to medium quality deposits could turn out to be medium to high grade deposits if thoroughly investigated.

With the exception of Birmingham and a few other highly restricted locales, I don't believe anyone has sufficiently detailed, modern information to justify a conclusion as to whether these billions of tons of potential ores in the Southeast are really low grade like the taconites. We should find out what the actual nature of large underground sectors of these ores really is.

My belief is that in the process we are apt to discover some high-grade deposits.

Now, to summarize: The Mesabi's high-grade, easily recovered hematites are playing out. To take their place, new processes have been developed for extraction of iron from taconites, but these are relatively more expensive processes than extraction from soft ores.

Importation of foreign ores, from a dozen nations, has risen rapidly, and can be expected to continue to increase.

The annual volume of imported ores substantially exceeds the volume of iron ore presently mined in the Southeast.

I commend this bill to you on several grounds:

1. The existence in being of a good, cheap transport net in the Southeast for assemblage of steel raw materials, and abundant fuels for reduction of ores;

2. The dangers to the national defense if we depend heavily on foreign iron sources without developed domestic deposits capable of quickly meeting our minimum emergency needs;

3. The advantages which can accrue, defensewise, from some dispersion of the iron and steel industry in the event of a surprise attack;

4. The rapid and continued rise of the market potential of the Southeast and corollary long-term demand in the area for more iron and steel goods;

5. The advantages to be gained from stimulating some production of low-cost ores to provide the Nation with an iron ore price lever should foreign sources attempt to take advantage of our dependence upon them in the future; and

6. Finally, considering that most of the iron ore researches in the South were completed decades ago without the benefits of modern geological know-how, that many areas of promise were sketchily covered at best, and that some bits of existing evidence suggest high quality deposits, there is the possibility of uncovering better ore potentials than have been reported to date.

One final point: Senate bill 2077 as it stands cannot accomplish what it proposes to do because of a time limitation. The bill now calls for a report from the Secretary of the Interior within 180 days after enactment.

Within so short a time about all that could be accomplished would be a review of existing reports on the area, some interviews with specialists in the area, analysis of specimens from a few new locales, and preparation of the report which this bill requires.

This means that the bulk of the information upon which the new report would rest would come from the same outdated studies which we now have, for there would be time for little else.

To leave the existing time limit in the bill defeats its purpose, and I urge that this not be done.

If a relatively large field force is put to work on this project, equipped with core drills and other tools to actually sample the deposits extensively, and if this force is at work in several localities simultaneously, and if it is judiciously directed, it will require at the very minimum 2 years to accomplish the broad outlines of what the bill proposes.

Even so, many localized situations could not be covered.

I invite your attention here to the fact that work on the taconites began over 30 years ago, but only relatively recently were the final stages in their processing worked out. Field and laboratory investigations are laborious and time consuming. Because of the long-term importance of this bill to the whole national economy and defense, I recommend that the time for the investigation be expanded to not less than 2 years, and preferably to 3.

I also suggest that it would be appropriate to insert in paragraph 3, the following phrase after "and in associated deposits": "including the magnetites, and both the Appalachian and Cretaceous Tertiary brown iron ores in the aforementioned States;".

Without this phrase the bill could be construed to call for surveys solely in the Clinton and immediately adjacent deposits.

There are some interesting indications of ores in areas other than the Clinton which the Senators who introduced the bill doubtless intended to have included in the survey.

Thank you, Mr. Chairman.

Senator BIBLE. Mr. Chairman, I have several questions for Dr. Prunty.

No. 1. Is this type of legislation necessary in order to require the Department of the Interior to make such a survey?

The reason for my question is that reference to their commodity data summary shows that in 1957 we spent $715,000 on their Bureau of Mines iron program and in 1958 they have authorized and will undoubtedly spend $828,500.

Can they do this study and this survey within the existing framework of present legislation?

Mr. PRUNTY. I am not familiar with the breakdown in the expenditure of funds for the Department of the Interior. I do not feel that I can give you a decent answer to the question.

I surmise that it would be as follows: That the bulk of those funds to which you refer are already committed to developmental work on iron ores in the Lake Superior district and it would be my opinion that such work should not be stopped because of the significance of this whole iron ore development question for our national economy and defense.

If my surmise is correct, sir, then there is need for additional funds.

Senator BIBLE. I am not questioning the funds. My question is directed to the need for authorizing legislation because it goes on to state:

> The Bureau of Mines iron ore program is a long-range effort to develop basic scientific and technical data to (1) expand the base of the country's iron ore resources through lower mining and ore dressing costs, and (2) encourage development of iron industries in the rapidly industrializing areas of the South and West by means of new beneficiation techniques, industry market studies, and safer, more efficient mining methods.
>
> Results: The Bureau program has achieved modest success; six methods of floating iron ore have been developed and a process for agglomerating the red ores of Alabama has been patented.

I am not questioning the bill. The only point I have is, Is additional legislation necessary to accomplish what you are striving for?

Mr. PRUNTY. In my opinion it is, but as I said, I am not familiar with all the details in the allocation of funds within the existing appropriation.

Senator BIBLE. Do you know whether or not this has been discussed with the Bureau of Mines and efforts been made to secure this type of survey through the Bureau of Mines?

Mr. PRUNTY. I think Captain Peyton will say that many people in the southeastern area have discussed this many times with Bureau of Mine officials and other Interior officials. We have discussed it repeatedly in the Department of Interior, Bureau of Mines, and United States Geological Survey.

I do not wish to infer any belittlement of what has been accomplished to date by these people.

In the Birmingham area there have been some excellent studies and we know a great deal about this, but this is the developed area within these iron deposits.

To my knowledge there has been no detailed examination of the deposits well beyond the Birmingham-Gadsden districts in eastern Alabama since about 1947.

There have been some field projects since then.

Senator BIBLE. Perhaps I do not make myself clear.

Is it necessary to accomplish what you are after to require the enactment of legislation? Do we need something special to do what you are asking? We clutter up our statutes with a lot of laws. Has a request been made of the Interior Department and the Bureau of Mines to undertake just such a study and survey as is embraced in the bill which is now before us?

Mr. PRUNTY. I know there have been many informal discussions with them. Whether there has been a formal request by one of these States, I am not in a position to say.

Senator BIBLE. We can determine that by asking them whether they need this law to go ahead and make a survey.

Mr. PRUNTY. It may be possible that the tenets of the bill can be met without the law. There are people better qualified in the operation of the Interior Department to answer than I.

Senator BIBLE. Do you have any idea what the surveys cost might be? Is there anyone in your group who is an authority on that?

Mr. PRUNTY. Captain Peyton is perhaps a better authority on that than I; hundreds of thousands. It will take a large field party working at top speed, working 2 to 3 years to accomplish what I envisage the bill should encompass.

The CHAIRMAN. The staff of the committee will make studies of this subject, of course, and I believe one of the members of the staff is ready to make a statement right now.

Mr. REDWINE. Senator Bible, the Department of the Interior takes a position that the legislation is not necessary and has reported adversely on this bill.

We just received that report a few minutes ago.

In discussions with the Department, however, they feel that it is not necessary since they have adequate authority.

The CHAIRMAN. Do they indicate that they will go ahead and do something about it?

Mr. REDWINE. No, Mr. Chairman.

I would say that legislation is necessary to get the job done.

Senator BIBLE. Do you have any idea what the cost will be?

Mr. REDWINE. No, sir.

Mr. Chairman, may the Interior Department's report and the Bureau of the Budget report be placed in the record following Mr. Prunty's testimony?

The CHAIRMAN. Without objection, it will appear in the record.

Senator MALONE. Sir, I am sorry I missed the early part of your testimony. I am very much interested in the development of raw materials, especially I am interested since Senator Talmadge is interested. I think he is a fine man and good Senator.

Do you have any idea now whether investigation has already been made as to its competitive value with other areas in the United States?

Mr. PRUNTY. Frankly, my thinking has not been in terms of competition. I am not expert on the production of steel, as such. So a lot of the cost implications in the question, I do not think I can answer well.

My point is this: that wherever we find iron ores in this country that look like there is a possibility, that look as though they give us a possibility of producing ore at reasonable cost, if that is in Senator Murray's home State, fine; if that is in California and we can use them economically, let us get them.

It just so happens that outside the Lake Superior district the next largest area we have of potential ores is in the Southeast.

Senator MALONE. I thoroughly agree that we should not overlook anything.

Now, you do not have the Lake Superior region in Minnesota and Michigan; their taconite deposits there.

Mr. PRUNTY. Yes, sir.

Senator MALONE. There are billions of tons they say and they have it now so they think that it is competitive. It runs about 30 percent. I think it is very important.

Now, we are producing a lot of iron ore in the State of Nevada. It has been shipped to Japan for several years.

Now, we are giving a little bit of money to India to develop its iron ore to supply Japan. The people in the West are perturbed about it—California, Nevada, and other places. We are furnishing money to displace their market.

Nevertheless, I fully agree with you that every kind of deposit that may have the future value should be explored. You are probably familiar with the fact that this committee made two reports—Senate Report 1627 of the 83d Congress and Senate Document 83 of the 84th Congress—covering the materials, accessibility of strategic materials in the Western Hemisphere.

I think you would be very much interested. We say we can make ourselves self-sufficient in everything we need for war or peace and, of course, other things will be of great interest to you.

Your work I think would help this along.

I appreciate your coming.

The CHAIRMAN. Senator Church, do you have any questions?

Senator CHURCH. No, Mr. Chairman, I have no questions.

The CHAIRMAN. Mr. Prunty, thank you very much for your very fine survey of the industry. We appreciate it very much.

(The reports of the Department of the Interior and the Bureau of the Budget, referred to above, are as follows:)

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D. C., March 17, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

DEAR SENATOR MURRAY: Your committee has requested a report on S. 2077, a bill to direct the Secretary of the Department of the Interior to undertake a survey in order to assist in promoting the production of concentrated iron ore and steel in the southern Appalachian area.

We recommend that S. 2077 be not enacted.

This bill, if enacted, would direct the Secretary of the Interior to conduct a survey of national significance in the defense and economy of our country to determine ways and means of affirmatively encouraging the production of concentrated iron ore and steel from the sources of ore and fuel in and contiguous to the southern Appalachian area. The bill would require the results of such survey to be made public within 180 days of enactment of the measure.

Considerable effort has been expended by both industrial and governmental groups to survey the various aspects of iron ore and coking coal of the entire

Nation, including the concentration possibilities of the large reserve of low-grade ores of the Clinton sedimentary formation of the southern Appalachians, in an attempt to achieve conservation of ore reserves and maximum furnace efficiency in reduction of ore to steel. However, the steel industry in the southern Appalachian area has found it to be more efficient and economical to blend high-grade foreign ores with the regional low-grade. In this connection, it should be noted that industry will develop minerals in those areas where it is found to be economically feasible, and industry will tend to convert its activities to other lower grades of ore as new technological discoveries reduce costs of production, regardless of the abundance of a particular grade ore in a particular area. For example, technological advances in the reduction of low-grade taconite have caused a shift to the mining of that grade ore. Such conversions will continue as new methods reduce costs. Steel companies themselves are doing much to insure an adequate supply of iron ore for their respective blast furnaces for many years to come, and the economic forces of supply and demand will foster a continued development and improvement of the plants treating low-grade ores.

The Bureau of Mines and the Geological Survey have conducted surveys and have been studying for many years various aspects of the utilization of iron ore and coking coal of the southern Appalachian area. These agencies have issued, and will continue to issue, many publications containing the results of these studies. Southern universities have made similar studies and have published detailed reports of the results. Such information which is presently available is of a sufficient comprehensive nature as to preclude the need for the further survey which S. 2077 would require.

It is our view that the selection of a particular commodity, or a particular geographical area, as this bill proposes, without reference to the factors which determine its national importance in the minerals program of the Government, would contribute little to the orderly conduct of the work necessary to discharge the Federal Government's responsibilities in the field of mineral resources. This is especially true with respect to surveys now in progress regarding the available supplies of iron ore required for national-defense purposes. A study having national significance cannot be confined to any one region or fraction of the industry. Passage of this bill would set a precedent for similar action, with respect to other commodities and other areas. The end result might well be the introduction of a large number of similar bills the enactment of which might tend to disrupt rather than to improve orderly mineral research and development.

The Bureau of the Budget has advised that there is no objection to the submission of this report to your committee.

Sincerely yours,

ROYCE A. HARDY,
Assistant Secretary of the Interior.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D. C., March 11, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

MY DEAR MR. CHAIRMAN: This is in response to your request for the views of the Bureau of the Budget with respect to S. 2077, a bill to direct the Secretary of the Department of the Interior to undertake a survey in order to assist in promoting the production of concentrated iron ore and steel in the southern Appalachians area.

The Secretary of the Interior, in his report on this bill, states that legislation which selects a particular commodity, or geographical area, is generally undesirable and presents additional reasons leading to a recommendation that the measure not be enacted. This Bureau concurs in the views set forth in that report.

Accordingly, this Bureau recommends against enactment of S. 2077.

Sincerely yours,

ROBERT E. MERRIAM, *Assistant Director.*

Senator MALONE. In the International Monetary Fund report dated December 20, 1945, there are stated the purposes of the International Monetary Fund, articles of agreement of the International Monetary Fund, and on pages 3 and 4 of this pamphlet, article 4, par values of currency, and I ask that pages 3 and 4 be made a part of the record, if it is possible, following the discussion yesterday.

The CHAIRMAN. I think that can be done.

Senator MALONE. I will submit it for the record.

Now, it is very clear here that no member, and we are a member of the International Monetary Fund, may change the price of gold without the consent of the organization, which was not made clear yesterday.

(The excerpt referred to by Senator Malone is as follows:)

"ARTICLE IV. PAR VALUES OF CURRENCIES

"SECTION 1. Expression of par values:

"(*a*) The par value of the currency of each member shall be expressed in terms of gold as a common denominator or in terms of the United States dollar of the weight and fineness in effect on July 1, 1944.

"(*b*) All computations relating to currencies of members for the purpose of applying the provisions of this agreement shall be on the basis of their par values.

"SEC. 5. Changes in par values:

"(*a*) A member shall not propose a change in the par value of its currency except to correct a fundamental disequilibrium.

"(*b*) A change in the par value of a member's currency may be made only on the proposal of the member and only after consultation with the fund.

"(*c*) When a change is proposed, the fund shall first take into account the changes, if any, which have already taken place in the initial par value of the member's currency as determined under article XX, section 4. If the proposed change, together with all previous changes, whether increases or decreases—

"(i) does not exceed 10 percent of the initial par value, the fund shall raise no objection, (ii) does not exceed a further 10 percent of the initial par value, the fund may either concur or object, but shall declare its attitude within 72 hours if the member so requests, (iii) is not within (i) or (ii) above, the fund may either concur or object, but shall be entitled to a longer period in which to declare its attitude."

There were 44 signatories originally and at the present time, in 1958, 65 nations are members. I mention this to show how closely our own currency is tied to the currency of virtually the entire world with the exception of the Soviet. It has been frequently suggested that we raise the price of gold in this country, but it can be seen that to do so would throw the currencies of practically the whole world into a tailspin. However, the purchasing value of our paper dollar is constantly depreciating. In the case of other nations depreciation is accomplished by increasing the number of units of their currencies to our dollar.

The CHAIRMAN. The next witness this morning is Capt. Garland Peyton, director of the Department of Mines and Geology for the State of Georgia.

Dr. Peyton, will you come forward please?

STATEMENT OF GARLAND PEYTON, DIRECTOR, DEPARTMENT OF MINES, MINING, AND GEOLOGY, STATE OF GEORGIA

Mr. PEYTON. Mr. Chairman, members of the committee, I have prepared a part of what I shall say. I have brought along a map or two.

As you know, my name is Garland Peyton, and I am director of the Georgia Department of Mines, Mining, and Geology, which is equivalent to the normal State geological survey.

I feel that my statement before the committee will be intended more as supplemental to that of Dr. Prunty, who has given you such a comprehensive and complete coverage of the region which we are discussing in which the iron ores referred to exist.

Senator BIBLE. Might I interrupt, Mr. Chairman, to ask whether the captain has additional copies of the prepared statement.

Mr. PEYTON. Yes, sir.

Senator BIBLE. I think it might be helpful, if you have a sufficient supply, we can follow it more easily.

Mr. PEYTON. There are some maps in there that you might like to refer to.

It is my feeling that a short discussion of the iron ore deposits found in Georgia, together with our résumé of unsuccessful efforts to produce a dependable estimate and appraisal of our iron ore reserves will point up the need for conducting such a regional survey as that proposed in Senate bill 2077.

During the years in which the Georgia Geological Survey has been active a number of excellent geological publications have been published on the different iron ores known to occur in the State, but in every instance we have been unable to get complete and dependable figures on actual tonnages and actual quality because of the lack of adequate drilling or other types of exploration which would have provided this much needed data.

A number of maps and charts have been incorporated in this brochure. These have been designed to illustrate in considerable detail not only where our different iron ore deposits are located, but the area and extent of such deposits.

(The maps referred to by Mr. Peyton were unsuitable for reproduction and are on file with the committee for reference.)

Mr. PEYTON. In addition, on chart No. 1—and before I proceed I would like to open this and let you see an enlargement of that chart No. 1—but the point of interest is the fact that you will notice the red, irregular lines of relatively narrow thickness and the shaded area which is shown on this map in yellow, on the smaller map in the report you will find that is more or less a lavender color where the yellow is here, but the red is the same—well, the red represents the thin layer that outcrops in a relatively flat, booklike deposit of rocks in which this one horizon of iron ore known as the Clinton red ores occurs, and it is to the yellow areas that I have referred to when I state that when a geologist has written a report on those ores in the past he could see the red was sticking out, much like the filling in a layer cake, but he could not go back into the mountain portion and under the surface of the mountain and have any definite idea of whether the red layer is the same thickness under there or whether it is the same quality of iron and iron content, silica, and so forth, and the only way that that could be obtained, that type of information, would be to either drill it or sink shafts down into the horizon referred to.

In a similar manner the brown iron ores will require drilling in order to prove an overall three dimensional measurement and to obtain samples which may be used to determine the average and quality of the bearing ores.

In the cases of the brown iron ores we have them in two different parts of the State, the northwest portion of the State just south of

the red ores shown on this map, and then again in the coastal plains south of Columbus and Macon.

We know that during World War II and prior to that time, our brown iron ores were sought by the smelters in the Birmingham district because in the first place they contain about 10 percent more iron on the average as metal, they are quite low in phosphorous, lower than the red iron ores are in phosphorous, and they have some manganese in them which in some steelmaking procedures, of course, is essential and desirable.

We know of instances where a few mines have been mined to a depth of more than a hundred feet without reaching the full downward extent of the ore occurrence.

During World War II the Bureau of Mines was directed, I believe, by the War Production Board, to explore some of these deposits and in Hope, Bartow, and Floyd Counties in northwest Georgia, they drilled to a certain extent and in a number of locations they found iron ore where there was no evidence whatsoever of iron ore on the surface.

They tried out a few places where it looked as if the iron ore deposits had been worked out years ago. They had actually been worked down to 25 and 30 feet in depth.

The Bureau went in and drilled those same deposits and extended the depth of the ores to as deep as 60 or 70 feet.

I mention that to illustrate the need for prospecting.

In the case of the third type of iron ores that they are known as magnetic iron ores or magnetite, they occur over a belt which parallels what we call our gold belt in the Piedmont, in Georgia, over a distance of a hundred miles and they lie in a northeast-southwest line that more or less parallels the strike or outcrop of the other ores already referred to.

In the case of magnetic ores we should have some geophysical work done which will reveal, due to the magnetic properties, possessed by these magnetic ores, their existence and even though they might be buried, will point out the areas in which the concentrations appear to be greatest and largest and, therefore, would prove a very good indicator in determining just where prospecting such as drilling or shaft sinking could be conducted.

Our red ores occupy an area or underlie an area of at least 130 square miles. We know that we have approximately 100 square miles of proven brown iron ore area.

We do not know just exactly how wide our magnetic iron ore belt would be, but we do know that it is approximately 100 miles in length.

It is our earnest hope that Senate bill 2077 will receive approval and, if it does, the Georgia survey will be more than happy to cooperate to the fullest possible extent, either our staff or by the contribution from our files and publications, or from the laboratory facilities which we have available.

I thank you.

The CHAIRMAN. Senator Bible.

Senator BIBLE. Mr. Chairman, I have only one question. I do not know whether it is proper to direct it to Captain Peyton or maybe it should have been directed to Dr. Prunty.

I have read the undated report from the Department of the Interior. I understand that from Mr. Redwine, it was received today. This was received today?

Mr. REDWINE. Yes.

Senator BIBLE. It appears to be undated, but it was received by us today.

Mr. REDWINE. Yes.

Senator BIBLE. I do not know whether you are familiar with this or not, Captain, but in fairness to the delegation making the presentation on behalf of the bill that you should have the opportunity of answering this one paragraph where they indicate their objections to the bill.

I think that it is no more than fair. They say this and it is very short, and I would ask you for your comments and possibly Dr. Prunty could join in on it. They say this, and I think this comes to the heart of their objection:

> It is our view that the selection of a particular commodity, or a particular geographical area, as this bill proposes, without reference to the factors which determine its national importance in the minerals program of the Government, would contribute little to the orderly conduct of the work necessary to discharge the Federal Government's responsibilities in the field of mineral resources. This is especially true with respect to surveys now in progress regarding the available supplies of iron ore required for national defense purposes. A study having national significance cannot be confined to any one region or fraction of the industry. Passage of this bill would set a precedent for similar action, with respect to other commodities and other areas. The end result might well be the introduction of a large number of similar bills the enactment of which might tend to disrupt rather than to improve orderly mineral research and development.

I call that to your attention. I do not know that there need be an answer right at this time, but I think it might be helpful for the record to be kept open for the purpose of permitting those of you who are vitally interested in this bill to suggest some type of answer.

Mr. REDWINE. Mr. Chairman, I have just discussed that with Dr. Prunty and his associates. I understand that Senator Talmadge and this group will answer this report fully and they will furnish us a copy of their opinion.

Senator BIBLE. I think they should have ample opportunity to answer it. I think you should study it. I do not expect an answer immediately, Captain, but if you could do that in due time, I think the record should be kept open for that purpose.

The CHAIRMAN. Yes; the record may be kept open for that purpose.

(Later Mr. Peyton filed with the committee a letter addressed to the Department of the Interior by Senator Talmadge in the above matter, which follows:)

UNITED STATES SENATE,
COMMITTEE ON AGRICULTURE AND FORESTRY,
March 31, 1958.

Hon. ROYCE A. HARDY,
Assistant Secretary of the Interior,
Department of the Interior, Washington, D. C.

DEAR MR. HARDY: Hon. James E. Murray, chairman of the Senate Committee on Interior and Insular affairs, has furnished me, as sponsor, a copy of your letter of March 17 which recommends that S. 2077 not be enacted.

Your Department opposes S. 2077 on two grounds: First, that the Bureau of Mines, the Geological Survey, and certain unnamed southern universities already have studied and written comprehensively on the subject matter of S. 2077, to the extent that further study is neither necessary nor desirable;

second, your Department thinks it improper, apparently as a matter of legislative policy, for Congress to direct a study of a particular commodity or particular region for the reason that such a study may become a precedent for Congress to direct other studies in the future.

If such is the case, I agree with your first conclusion because I am unalterably opposed to ineffective use of Government funds. If the information sought by S. 2077 is now on hand and in satisfactory form. I have no desire to duplicate. The question arises, however, as to the accuracy of the following statement in your letter:

"Such information which is presently available is of a sufficient comprehensive nature as to preclude the need for the further survey which S. 2077 would require."

I am informed by persons highly expert in this field that adequate information does not exist and that the facts available are both fragmentary and isolated. I am told that there have been extensive surveys in the Birmingham area, but (1) that the indicated bulk of the major deposits is far removed from Birmingham and (2) that comparatively little is known about the area of the major deposits, particularly as relates to their practical uses and availability for defense and civilian purposes.

Further, I am told that such studies were made in the past and were designed and came about under conditions quite different from those at present. They were not generated because of long-range known conditions of strategic importance to our national welfare. For example, the effect of the depletion of the Mesabi Range was not a prompting factor.

I cannot agree with your second point—that this study should not be voted because it might become precedent for future studies. It is the duty of Congress to enact laws for the defense and general welfare of the United States. The availability of useful iron-ore deposits, located within our national boundaries, regardless of where they may be, is of much significance to defense and general welfare. The importance is accentuated by knowledge that the days of the Mesabi Range are numbered and by the fact that last year we imported more than 25 million tons of foreign ore. It is urgent that we have adequate knowledge of the iron ore in this country.

Furthermore, I cannot understand your point that the commodity dealt with under S. 2077 happens to be iron ore or that the region is the Southern Appalachian. Presently indicated facts amply justify both the commodity and the region. Iron ore is the lifeblood of steel and steel is the lifeblood of our defense and national economy. It so happens that present geological information indicates that the Southern Appalachian and Lake Superior regions are the two areas containing the Nation's largest iron-ore potential. It is my view that iron ore is where you find it and you have to search for it and work on it wherever it is, whether in the Southern Appalachian region or elsewhere.

I will support with equal vigor any legislation directing the study of any commodity which is vital to the life of this Nation, regardless of where in the United States it may be located, provided there is reasonable indication that the results of such study will prove of sizable national consequence.

As I intend to press for passage of this bill, I do herewith respectfully request you to furnish promptly to the committee, with three copies to me, the facts on which your position is based, including results of core drilling and areas so drilled. This will help the committee in considering S. 2077. I would also like for you to furnish to the committe and me the following information:

1. Approximately how much money has been spent by the United States Government (by loan and grant, through World Bank contribution and otherwise) since World War II to develop iron-ores and steel facilities in other countries? Please name the countries and the amounts spent or allocated to each.

2. Was your Department, or any branch of it, consulted with reference to any such foreign project and, if so, did it report favorably or unfavorably as to the desirability of such action?

3. Has your Department been consulted with reference to any presently proposed aid by our Government to develop iron ores or steel facilities in any other countries of the world? Is so, what has been its position in each instance?

4. How much money has been spent, annually since World War II, by your Department (either by the Bureau of Mines, the Geological Survey or otherwise) in connection with iron ores in the United States? Please give approximate figures as to how much money was devoted to the particular regions involved and approximately how much was spent in thedifferent basic categories (such as for surveys, research, etc.).

I shall be deeply grateful for a reply covering these points at your earliest convenience.

With every good wish, I am,

Sincerely,

HERMAN E. TALMADGE.

The CHAIRMAN. The next witness is Robert S. Lynch, chairman of the board of the Atlanta Steel Co., Atlanta, Ga.

STATEMENT OF ROBERT S. LYNCH, CHAIRMAN OF THE BOARD OF DIRECTORS, ATLANTIC STEEL CO., ATLANTA, GA.

Mr. LYNCH. My name is Robert S. Lynch. I am chairman of the board of directors of Atlantic Steel Co., Atlanta, Ga.

Though not truly expert in the field of ores and metals, I do have limited qualifications. All my life I have worked with steel. Starting as a laborer in a mill in the Pittsburgh area, I have worked in most phases of production and administration of a steel business. Also, I am a member of the board of the American Iron and Steel Institute.

This bill deals with the discovery and development of iron ores within the United States.

However, the significance of these ores cannot be appreciated without fully understanding the importance of a strong and healthy American steel industry. In this regard we must clearly recognize—

(1) That steel is the backbone of the industrial and military life of this Nation; and

(2) That there can be no steel industry without an adequate amount of commercially accessible iron ore of adequate quality.

It is crucially important that our scients keep us well ahead of the rest of the world in those categories which determine our defense and our survival. And it is of corresponding importance that our basic industries—of which steel is the most basic—at all times be kept equal to the task of carrying out the results of scientific research.

In order for the steel industry to be kept strong, long-range planning for adequate plant capacity and for adequate raw materials is absolutely necessary. The matter of planning for the prime raw material for the future of the steel industry is before you today.

In considering the needs for the future of steel, we must estimate the likely domestic demand. The population of the United States—172 million in 1958—is now growing by 3 million each year, and the annual rate of consumption of steel products—now 1,415 pounds per person—is increasing.

These figures indicate that there is going to be a tremendous demand for steel during the years ahead, and they show the timeliness of present study of the potential—in terms of raw materials—for supplying this great demand.

Thus far, there has been domestic iron ore, adequate in amount and quality, to fill the steel needs of our industrial economy.

The Mesabi and other beds in the Lake Superior region have been sufficient to supply 80 percent of these national needs. However, as Dr. Merle Prunty has pointed out to you, these beds are being depleted rapidly—to such an extent that the steel industry is searching anxiously for iron ore for the future.

The extent is shown by the fact that in this country countless millions of dollars are being spent to learn to make steel from low-grade ores—such as taconite—and countless millions more—much of which, I am informed, are funds of the Federal Government—are being spent to find and develop iron ore in countries across the sea.

Note that as a result of these efforts more than 13 million tons of foreign iron ore are being brought into the United States each year.

I do not quarrel with the notion of bringing iron ore into this country, but I do wish to make one observation.

American-owned iron ore located overseas is far less desirable for use in American steel mills—particularly in case of war—than iron ore located at home. We should place major reliance and dependence on it only if it is altogether necessary.

In order to minimize this possible dependence, every reasonable effort and expense should be exerted to determine the nature and availability of iron ores in the continental limits of the United States.

A fraction of the money being spent by the Federal Government with relation to overseas iron ore, if spent to find iron ores in this country, will very likely produce far more national benefit than all of our money spent seeking foreign ores.

There is another most important benefit which will come to the Nation from the discovery of large additional amounts of iron ore at home.

Should we become too dependent on foreign iron ores to sustain our steel industry, the price of such ores to our mills could become whatever the foreign sources wish to charge. And, our mills must pass their raw-material costs on down the line, until every member of the American public feels it.

However, if the foreign sources know that we also have local ores available to our mills, then their prices will be determined with this competition in mind—a very important factor to our national economy.

This bill relates to iron ores in the southern Appalachian region. At present, the six-State area of Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee has foundry and steelmaking capacity of about 8.3 million tons a year. But, in 1956 the annual consumption of iron and steel products of this region was more than 16.8 million tons—meaning that their total production capacity is now less than half their present consumption.

In viewing the future of this situation, please note that there is tremendous industrial growth in this area and that the rate of consumption of iron and steel products is rising steadily.

And yet, even if there should be no increase of per capita consumption above the 1956 level, our analysis indicates that the consumption by 1975 will be approximately three times the present iron and steelmaking capacity of this area.

The question arises whether such a condition of production deficiency is necessary and likely to be permanent. Must the industrial life of this rapidly growing region—duplicated also in other areas of the country—always look elsewhere, possibly overseas, for most of its steel?

Facts show that such deficiency is both unnecessary and undesirable.

The present steel and foundry capacity of the southern Appalachian region is located and determined primarily by the commercial avail-

ability of prime raw materials. The blast-furnace mills are located near the presently known large iron ore deposits, and the electric furnace mills are located with relation to availability of their basic raw material—scrap metal.

The long-term limitation of steel production to sustain various sections of population in the United States will be principally a matter of the limitation of local raw materials. Other factors will not be problems.

If commercial iron-ore deposits can be found, the technique and fuels for reducing them are on hand, and the necessary capital for the necessary plants will not be a major problem. But the first problem is to seek and locate the deposits in an intelligent and thorough manner.

This bill can be a very long step forward. It does two things: First, it calls for an expenditure of Federal funds to locate iron ores. This is a very proper use of Federal money—

(1) Because of the great national importance of domestic iron-ore availability; and

(2) Because no State nor private agency or firm has the powers and facilities for conducting the type of intense survey and study which is altogether essential.

It is almost ridiculous and neglectful, either from the standpoint of watching out for national defense or watching out for the future health of the national economy, for the Federal Government not to be amply informed on a point as vital as the existence of domestic iron ores.

I do not presume to suggest precisely how much study be conducted, but do believe that it should be designed and carried out by the proper agencies of the Federal Government, working in conjunction and cooperation with the proper agencies of the State governments.

Furthermore, the study should not be undertaken if it is designed to result in merely compiling data which has been prepared unsystematically over the past 100 years and if it is merely to scratch the surface. If the matter is worth being undertaken, it is worth being undertaken properly.

The second accomplishment of this bill is that it calls for study of a specific region—the southern Appalachian area—where there is already a strong and well-reasoned basis for belief that major deposits of commercial iron ore exist.

Dr. Prunty, who is nationally recognized as being highly competent in the fields of geography and geology, has stated to your committee that from present information an intelligent guess is that this region contains more than 11 billion tons of desirable and available iron ores.

Before voting to use Federal funds for iron ore study you must first be convinced of the national significance of this raw material, and to consider intelligently the question of the true importance of a continuous supply of iron ore, you must know certain fundamentals about the making of steel.

Iron ore is the original basic raw material from which all iron and steel is made. But though it is the original raw material, iron—in the form of ore—is not always needed for making new iron and steel.

Scrap metal—which consists of previously used iron and steel—is the chief raw material in making new steel in electric furnace mills.

Thus, it is important to realize that the continued reuse of iron and steel scrap can help keep a continuous flow of the basic raw material for making more new steel.

However, it is equally important to realize that we cannot place full—or even principal—reliance on scrap as a raw material because a great portion of the used iron and steel does not ultimately come back to the mills.

There is a gradual but steady and endless attrition whereby a very definite percentage of each ton of new iron and steel never gets back to the mills as scrap.

For example, in recent years there has been a steady withdrawal of domestic iron and steel scrap from the American market. Foreign steel mills—because of their low-cost labor, their Government subsidies and because of their rapidly expanding opportunity to sell their steel in growing amounts in the American markets—can and do pay more for scrap than American producers.

Consequently, increasing amounts of American scrap are going to them; shown by the fact that in the early 1950's the amount of scrap leaving the United States averaged less than 300,000 tons per year, but by 1956 the amount was more than 6 million tons. Obviously, this is a definite attrition of scrap as a raw material for domestic steel producers.

A chief factor which steadily dissipates the availablity of scrap as a continuing source of raw material for new steel is the fact that much of the steel produced, because of the nature of its use, becomes permanently unavailable as scrap for more steel. It becomes permanently imbedded in concrete or in the earth or in water, et cetera. Such is the case of the millions of tons of steel which have been and will be in the Nation's streets and roads.

For example, it is estimated that about 25 million tons of heavy structural pilings and plates will be needed for the present national highway bridge-building program; of which about 25 percent, or 5 million tons, will never be recoverable. It is also estimated that about 17 million tons of reinforced bars and wire mesh will be needed for the highway program, and none of this will ever be recoverable.

So, from this single project, 22 million tons of steel will cease to be usable as scrap from which to make future steel.

Another scrap dissipating factor which cannot be overlooked is the situation with regard to cans and other metal containers.

I am reliably informed that the ever-increasing use of these metal containers will soon result in an annual container consumption of more than 10 million tons of light-gage steel, known as tinplate.

Since most of such containers will end up in garbage heaps, there is little likelihood of any appreciable amount again reaching the steel mills as scrap for future steel. This becomes a tremendous factor in the growing problem of nonrecoverable scrap.

Much steel also becomes forever lost by being buried in the ground as pipe for oil and public utility uses. Much more gets forever lost and buried on the farm, et cetera.

Therefore, we should not delude ourselves by placing impractical and undue reliance on scrap as the major and assured source of raw material which will sustain the great demand for future steel production. There must always be ample, commercially acceptable iron ore.

Since we cannot place firm reliance on scrap to sustain our steel

industry, we must be constantly alert to the fundamental raw material—iron ore.

The next question, assuming that we discover added desirable iron ores in this country, is whether the necessary techniques, capital, plants, and equipment for developing them can be obtained. In viewing the question, it is important to understand one point as to steel production.

Though practically all iron ore is now being processed through blast furnaces—which are immensely expensive—into hot metal or pig iron and later used to produce steel and castings, note carefully that blast furnaces are not the only means of obtaining the iron from the ore.

For many years in Europe and more recently in Mexico iron ores have been reduced through various processes into product called sponge iron. Containing 90 to 95 percent iron, sponge iron has a little or no carbon content and is excellent for making steel and castings in electric furnaces, open-hearth steel furnaces, and cupola iron furnaces.

At present, elaborate research and developments for making sponge iron are taking place in pilot plants in the United States and Canada. These reduction processes have great versatility and though they may vary with different iron ores, the processes have several common beneficial characteristics:

1. The proposed sponge iron plant units can be economically operated at a daily production as small as 25 to 100 tons per unit per day, whereas blast furnace capacities range from 1,000 to 2,500 tons per unit daily.

2. Since the sponge plant is physically small and comparatively simple, it can be erected near the ore body which it serves. Thus, steel production can become commercially feasible in areas of small ore deposits, and such plants might be scattered widely enough to help make the overall steel industry more immune from devastation in event of enemy bombing.

3. The sponge plants will have low investment per annual ton of capacity. While blast furnaces cost more than $75 per annual ton, sponge plants are estimated to range from $30 to $50 per annual ton.

4. Sponge plants are not limited to metallurgical coke for heat energy and reductant. They use a variety of fuels.

Though the sponge iron processes are not yet finally proved as large commercial operations, there are strong indications of favorable technical results and estimates of operating costs are encouraging, particularly to small producers. I think that they will contribute tremendously to the strength and soundness of a steel industry which is equal to sustain America's future for a long while.

Summed up, gentlemen, the opportunity presented by this bill leaves me with the following conclusions:

1. Steel is without doubt the foundation stone of the military life and general civilian economy of the United States. Our national defense and industrial development will not exceed our availability of steel.

2. If we are to enjoy the benefits of ample and adequate steel, the American steel industry must be strong and healthy—and must be adequate in raw materials, plant, and capital.

3. The absolutely essential raw material for steel is iron ore. If reasonably possible, such ores must be available within our own borders. Production techniques now indicate that if we have the ores, they can be commercially extracted.

4. Though we have had splendid domestic iron ore sources which have fully sustained our steel industry of the past, the date of exhaustion of these sources is now foreseeable. It becomes imperative that new domestic sources be sought—and found. Much effort and expense to locate commercial iron ore deposits is not only justified but is seriously necessary.

5. This bill provides for study of iron ore potential in a region of the United States where there is good evidence to indicate that substantial deposits can be proved.

I think that this study should be approved by the Congress, and think that Congress should authorize similar study of any other part of the United States which has comparable indications.

The CHAIRMAN. Thank you, Mr. Lynch.

Senator Watkins, do you wish to ask any questions? We have been listening to a series of witnesses who have been testifying, giving us a survey of the steel industry of the United States and the need for developing the ore deposits that are essential to make it a strong industry.

They have a bill pending, Senate bill 2077, introduced by Senator Talmadge, calling on the Department of the Interior to make a study of this proposal.

Senator WATKINS. No, I do not have any questions, Senator. It is a very fine thing to have a survey made not only in the southern part of the United States, the Southeast, but all other areas where surveys have not been made.

I understand, however, that quite a large number of surveys have already been made by the United States Geological Survey and the Bureau of Mines.

I do not know how much of the territory they have covered. If there is anything left that have any prospects they ought to be surveyed.

Mr. LYNCH. May I presume to suggest to the Senator one thought: We have to look at the iron ore development today in the light of, one, today's needs, and control of iron units, whether they are from scrap or whether they are from newly produced mine ore.

A blast furnace, as I stated, has the greatest production capacity for making this production, but it has always been necessary to put in the back of the blast furnace a very heavy expenditure because of your byproducts plant and then you have to have a steel plant to take care of the hot metal.

You have to have an open hearth to reduce that hot metal. Today it is the practice to take hot iron, 3 percent carbon, and reduce it by injecting an oxygen stream into the hot metal, reduce it in a matter of minutes down to usable steel.

My point is that we have to look at the technique of future steel development in relation to the availability of iron ores, both accessibility, qualitywise, and quantitywise, to determine where the use fits today rather than to tie it in with the same study made years ago,

which might change its importance pro and con in the light of today's technical developments.

The CHAIRMAN. Thank you very much, Mr. Lynch. I think you have made a very fine contribution to the studies we are making. We hope that some arrangement may be worked out with the Department of the Interior to aid your section of the country in developing, discovering and developing these iron deposits that are supposed to exist there.

The next witness this morning will be Clyde L. Flynn, Jr., representing the fluorspar industry.

STATEMENT OF CLYDE L. FLYNN, JR., ON BEHALF OF THE FLUORSPAR INDUSTRY

Mr. FLYNN. Mr. Chairman and members of the committee, my name is Clyde L. Flynn, Jr., and my address is Elizabethtown, Ill.

I am vice president of the Hicks Creek Fluorspar Mining Co. and also a representative of the Independent Domestic Fluorspar Producers Association.

Mr. Chairman, it is a pleasure to be here before your committee, and I wish to compliment you and the committee on calling this hearing and in your willingness to seek a solution to this most serious problem confronting the mining industry.

It is essential that some solution be found at once if we are to have a domestic mining industry.

What is this problem confronting the mining industry? It is just this: the combined available supply of minerals from domestic and foreign sources, exceeds our domestic requirements. This oversupply has resulted in the lowering of domestic prices to a point where domestic mines cannot profitably operate. But the price is high enough so that it affords a profit to low-cost foreign mineral producers.

Although some may claim that the so-called downward trend in our domestic economy is responsible for the condition of the domestic mines, I know of no domestic mining industry that would not today be operating at full capacity, if we did not have to surrender the major portion of our domestic market to low priced imports.

In other words, there is adequate domestic demand today, sufficient to provide profitable production for our minerals extracting industry and full employment for our miners, were it not for the competition of low priced imports.

However, the level of production and the level of employment in the domestic minerals industry today is alarmingly low. So low, in fact, that prompt and effective steps must be taken if the industry is to survive, and here, Mr. Chairman, I would like to make one thing perfectly clear, sir.

We are interested in a profitable domestic mining industry and employment for domestic miners. No one in our fluorspar association operates mines abroad or has an interest in foreign mines.

We believe that the domestic minerals industry should be permitted to operate as nearly at capacity as is economically possible and, we feel that imports should not be allowed to interfere with this production.

We believe that imports should be permitted only when needed to supplement domestic production and should not be permitted to displace it.

The jobs of domestic miners should not be sacrificed to provide employment for foreign miners. A domestic minerals industry which last year produced minerals valued at something over $18 billion should not be closed down in order to benefit foreign producers. By permitting this to happen, we further weaken our economy and seriously jeopardize our security.

And now, Mr. Chairman, let us consider specifically the problem in the fluorspar industry. I think probably our problem is no different from that of any other domestic mining industry, except in degree.

Fluorspar is the commercial source for fluorine. And here, I would like to quote from the fluorine program statement, by Robert B. McDougal of the Department of the Interior, dated February 1958.

If it is possible, Mr. Chairman, I would like to have this statement included in full in the record at the end of my statement.

The CHAIRMAN. It may be carried in the record.

Mr. FLYNN. I think they are available now as to domestic production, imports, and consumption. Commerce just gave consumption figures, so we have that.

The CHAIRMAN. Very well.

Mr. FLYNN. The McDougal report states:

> Fluorspar is a poisonous, violently reactive gas that attacks glass, metals, and even asbestos, and combined with other elements to form highly stable compounds. It is used in the production of aluminum, steel, and high octane aviation fuels; in refrigerants, propellents, and plastics; in producing glass and enameled products, and in many other uses essential in war and in peace.

I might add to that, Mr. Chairman, that today fluorine is being tested as a propellent by the armed services for our missiles. We are told that it has higher promise than any other oxidizing agent that they have.

I would also like to have the record show that some years ago a Dr. Smyth of the Atomic Energy Commission made a report to Congress and in that report he stated that an adequate supply of fluorspar was just as essential to the atomic energy program as is a source of uranium.

Fluorspar, both metallurgical and acid grade, has long been classified as strategic and critical.

The consumption of fluorspar in this country has been increasing at a very rapid rate since the end of World War II; in fact, at a greater rate than any other mineral.

The future rate of increase in consumption will, in our opinion, continue to accelerate, particularly in the acid grade fluorspar field.

Referring again to the recent Department of Interior report, we find the Department in agreement with us.

This morning I looked at the Department of Commerce report and I found that they also point out that there will be a substantial increase in the consumption of acid grade fluorspar over the next 2 years even though some of the other minerals do not show this increase.

With such a bright future, one might be led to inquire as to whether this industry might not be in good shape. Far from it.

The foreign producers are enjoying unparalleled prosperity, having almost completely captured the domestic market, certainly dominating it, while the domestic fluorspar industry is subsisting almost wholly from shipments to the Government.

Had it not been for the action by your committee in enacting Public Law 733, and stockpile purchases by GSA, this hearing, insofar as the fluorspar industry is concerned, would have been a post mortem examination, and I want you and this committee and the Congress to know that fluorspar industry is truly grateful for the assistance you provided us.

Public Law 733 expires this year and unless something happens between now and the time that program is terminated, acid grade fluorspar production in this country for all practical purposes will cease.

You may ask what is responsible for the tremendous volume of imports. Acid grade fluorspar imports last year apparently exceeded domestic consumption by something like 100,000 tons and in the metallurgical field imports accounted for over 75 percent of the market.

That is, there were 100,000 tons more of acid grade fluorspar imported than was consumed.

Senator WATKINS. What is happening to it?

Mr. FLYNN. Part of it is going in the stockpile.

Senator WATKINS. Commodity Credit Corporation.

Mr. FLYNN. That is through exchange for agricultural products. That is true.

Senator WATKINS. Where does most of it come from?

Mr. FLYNN. Mexico, Spain, Italy, Sardina.

First, of course, is the element of wage costs abroad. In the principal competing country, Mexico, wage rates per day, where they are used, are ordinarily less per day per man than are our costs per man per day for workmen's compensation insurance.

Almost all of the crude ore is hand produced. For metallurgical shipments this crude ore is hand cobbed and prepared for shipment.

Thus, metallurgical grade fluorspar is produced abroad and prepared for shipment and exported without the use of anything but hand labor. Acid grade fluorspar is produced from the hand mined crude ore in flotation mills identical to our domestic mills. Generally speaking, except for Canada, foreign wage rates in the fluorspar industry are from 10 to 15 percent of our domestic rates.

Second is the lack of capital investment required abroad in fluorpar mines. Little, and in most cases, no machinery is employed, all the mine work is done on contract and the contractors are not paid until the ore is sold abroad and the seller has received payment.

The mills abroad, very modern and of design equal to ours, have in every instance except one been financed by the United States Government. Some were outright gifts.

Third is the ready market for foreign fluorspar which has been provided by our Government. The barter program of the Commodity Credit Corporation has tremendously increased the capacity of the foreign fluorspar producers.

This is clearly evidenced by shipments into this country last year of acid grade fluorspar some 100,000 thousand tons in excess of domestic consumption requirements. Should CCC ever start speculating in the metallurgical fluorspar market the result, I am sure, would be complete disaster for the domestic producer. Some Government contracts for foreign acid grade fluorspar have been at prices far above that paid domestic producers.

A fourth factor which enables foreign producers to sell at prices we domestic producers cannot meet is the selective commodity currency exchange system employed by some foreign governments. This system makes tariffs a meaningless gesture on our part.

Another factor working to the advantage of the foreign fluorspar producer is the tariff rate presently in effect. The present rate of duty on fluorspar is an unusual one, in fact, the only one of its kind in the whole tariff schedule so far as we have been able to determine.

This had been commented upon by both the Tariff Commission and the Department of the Interior. It is the only instance where the higher valued product—acid grade fluorspar—carries the lower rate of duty, and the lower valued product—metallurgical grade fluorspar—carries the higher rate of duty.

I might add here that in many cases consumers import low grade material which has the high rate of duty. They import it in bond, upgrade it, take it out of the warehouse and pay a lower rate of duty on it.

Where has all of this led, Mr. Chairman? Fluorspar occurrences are noted in 14 States: Arizona, California, Colorado, Idaho, Illinois, Kentucky, Montana, Nevada, New Hampshire, New Mexico, Tennessee, Texas, Utah, Washington, and Wyoming.

Today it is being mined in five.

I might add it has only been in the last few weeks that a tremendous deposit, apparently it is tremendous in size, has been located in Nevada. It covers an area of some 15 miles long and up to a half a mile in width.

Where once we furnished all of our domestic requirements our domestic fluorspar industry today is helpless before the onslaught of imports.

The report of the Department of Interior to which I previously referred states on page 16 that "We are becoming less self-sufficient in fluorspar supplied," though in the next breath they state that "ample reserves are available for development."

On that point, Mr. Chairman, as the mines start to close as they have already done, there won't be any exploration work for additional reserves. Nobody will put money in a program to find fluorspar when we cannot sell what we already have.

If it had not been for the assistance which Mr. Mittendorf over in his department in the Interior Department has given us in the past few years in finding these deposits, I do not think we would have had nearly as much known fluorspar reserves as we do now. He has done a real job so far as the fluorspar is concerned.

I know every other member of the mining industry feels the same way with respect to the job Mr. Mittendorf is doing.

Again and Again, Mr. Chairman, we hear this claim made by those who would like to encourage imports of minerals: "We are running out of this, and we are running out of that, we are no longer self-sufficient," is heard from every side. This is but a clever play on words.

What happens is that imports force the prices down and the domestic mines close, then the theme starts.

We are not running out of any mineral so far as I am aware. Given an adequate price we can furnish all we require of nearly every mineral

we consume. We are probably the most self-sufficient country from a minerals resources standpoint of any country in the world.

We have known reserves of fluorspar for 30 years—page 10, Department of Interior report, at the 1951–55 rate of production—and available sources of fluorine from phosphate rock equal to 900 million tons of fluorspar—page 11, Department of Interior report—or more than 900 years' requirements at the present rate of consumption.

It is only the import of low-priced imports that makes the situation as it is today—and how many of those mineral imports will be available when we need them?

What is the safe course for us to pursue? Should we rely on cheaper foreign mineral imports and close our domestic mines as our consumers advocate?

Do we truly benefit ourselves by purchasing all of our minerals from the underdeveloped countries? Is foreign trade thereby expanded?

It seems to me that we might perhaps lose twice.

If we obtain our fluorspar abroad, our domestic mines will of course close. Our domestic miners first draw unemployment compensation, then go on relief. They are then a charge upon our other taxpayers. This has already been demonstrated in Illinois, as well as in other States. The governmental functions and schools must be supported by the rest of our economy. The purchasing power of the miners is lost.

But what has happened abroad to the foreign miners who are employed? Are they buying the manufactured products our miners would ordinarily purchase?

Hardly so, show me a foreign miner, except possibly Canadians, who own an automobile, electric or gas refrigerator, or stove, TV, or any of a number of other appliances our miners consider as necessities. I have never seen one. A burro or a German or English bicycle; a dobe house with mesquite fire is the ordinary foreign miner's lot. So, we have lost again.

And what has happened to our domestic mobilization base? Although I must confess that I am not at all sure, even in the case of fluorspar, with which I am more familiar, that I understand what ODM means by this phrase.

Certainly no one in the domestic fluorspar industry is aware of or has been advised as to the level of productivity of fluorspar that ODM considers essential in order to maintain the mobilization base. ODM must know this, but certainly the domestic fluorspar industry which is expected to meet it, does not.

And, I know of no other mining industry that has been so informed. Neither have we been advised as to what expansion might be needed in an emergency, even though we know that the very products in which fluorspar is essential will be the products whose production will be expanded the greatest.

What has the Department of the Interior done to help solve the problem in the fluorspar industry? In order to be fair, I must admit that they have reported that they have studied our problem. They say they are still doing so, as they have been for some few years.

I might add that we are one of the most studied industries that I know of. The Tariff Commission conducted a 332 investigation that lasted 9 months.

Then they conducted a section 7 investigation that took another 6 or 7 months.

Senator WATKINS. Did they make any recommendation?

Mr. FLYNN. Yes, they did. It was turned down at the White House.

Senator WATKINS. When was that?

Mr. FLYNN. Right before Public Law 733 was passed, in early 1956.

Then ODM studied us for a while. We have two big reports now from the Department of the Interior outlining studies that they have made.

The Department of the Interior reports actually recognize our troubles and suggest what is needed to solve them, though no legislation has been proposed.

In 1957 they stated, on page 47–A of the printed hearings before this same committee, that—

> Domestic producers experience difficulty in meeting the competition of foreign producers in the United States market.

And, further, observed that—

> Tariff is a factor, but this has not greatly restricted imports of acid-grade fluorspar into the United States.

And that might qualify as the understatement of the year, Mr. Chairman.

Senator WATKINS. Even if the tariff rates were fully effective, they are not high enough nowadays because of the increased cost of production of fluorspar in this country.

Mr. FLYNN. That is true. They were enacted back in 1930 when the price of fluorspar was less than half of what it is now. As the price has gone up the fixed duty has had little, if any, effect.

Senator WATKINS. I assume that the reciprocal trade treaties entered into have something to do with this.

Mr. FLYNN. That is right. Import duties were reduced at Torquay.

They added that—

> In the absence of Government stockpiling and domestic purchase programs a substantial reduction in domestic production could be anticipated.

Senator WATKINS. What is the date of that?

Mr. FLYNN. Those three quotes were from the report they submitted last year at your hearing here. That was in 1957.

Now, again, this year, in the report to which I have previously referred, the fluorine program statement that the chairman says will be included as a part of this record, the Department of the Interior observed that the outlook is for increased consumption of fluorspar.

Again this year in the report to which I have previously referred, the fluorine program statement, the Department of the Interior observed that:

> The outlook is for increased consumption of fluorspar, particularly as a source of fluorine for the chemical industry. A long-range expansion in domestic output also may occur, but producers are confronted with major cost and quality problems in competing in the present market.
>
> Imports in recent years have become an increasingly important factor in the industry.
>
> As a whole, domestic fluorspar has been supplying a declining fraction of the market in recent years. Difficulty in meeting specifications required by buyers and the competition of foreign fluorspar are among the factors which have influenced trends in the industry.

In recent years imports have been greatly stimulated by the strong demands of the consuming industries, and the requirements of the national stockpile. A long-range increase in the domestic fluorspar production may take place, but increased output from the domestic mines is contingent upon competition from imported fluorspar, price structure, tariff regulations, and the solution of a number of technical problems.

The new matter of quality and specifications has been injected this year. Actually the domestic mines can, have, and still do produce fluorspar identical in every respect, in both chemical and physical specifications, with imported.

The only difference is in our cost of production and that abroad. After all, we are selling to Government stockpile which has the most stringent specifications I ever encountered in the fluorspar industry.

Now, Mr. Chairman, having recognized the problem, the Department of the Interior has outlined on page 20 an avenue of attack on problems. There they state that:

There are several possible approaches to the problem of industry adjustment to the current market requirements no one of which is wholly satisfactory and all are more or less supplementary.

(*a*) Continued market control by Government, with progressive withdrawal from such control.

(*b*) Stockpiling of surplus supplies.

I might add here that they put (*a*) and (*b*) here, continued market control by the Government with progressive withdrawal from such control and (*b*) stockpiling surplus supplies.

I would assume that the two work together, I know of no Government control other than the control exercised by purchases through stockpiling.

It does not appear that that is going to be a progressive withdrawal. They have not requested funds to continue the program, it is going to terminate rather abruptly this year.

Senator WATKINS. The authority expires this year, in other words.

Mr. FLYNN. The authority expires, but we don't have the money to run until the end of this year.

Senator WATKINS. I know we had trouble on the House side in getting that money for the other metal.

Mr. FLYNN. For tungsten, that is right. So far we have had no objection in the House side to an appropriation for fluorspar.

However, Interior has not requested an appropriation for it to continue the program until the end of the year.

(*c*) Import control: Technological solution of this problem will require time and a great deal of research, but pursuit of this course is most desirable because it will place the industry in a firm, competitive position.

I believe that the Department of the Interior will find the situation in other minerals very similar to that in fluorspar, and will further find that import control is the only reasonable solution to the problem.

I am happy that they have reached this conclusion in respect to fluorspar. I only hope that legislation along this line is proposed by the Department of the Interior very soon.

I realize that this committee has to cover the entire field of minerals in this hearing. Fluorspar is not one of the large mining industries, but it is exceedingly important.

We hope that this committee can recommend to the Congress legislation which will enable us to operate and will restore to the mining industry some degree of stability.

Thank you, Mr. Chairman, for the time you have given me here today.

The CHAIRMAN. Do you have any questions, Senator Watkins?

Senator WATKINS. I am wondering, how do you get along under the stockpiling program up to date?

Mr. FLYNN. What has happened under the stockpiling program to date, Senator, it has enabled the industry to operate. There has been practically no expansion in production. We have not been able to get into the commercial market.

I might also illustrate one of the difficulties.

There is legislation before the House today that would increase the tariff on fluorspar when imports reach a certain tonnage. Now, that increase in tariff would go up in the case of acid-grade fluorspar, which today has a duty of $1.80 a ton, after imports exceed a certain tonnage, the tariff would go up to $15.

We thought when that legislation was introduced or proposed——

Senator ALLOTT. From $1.80 to $15 a ton?

Mr. FLYNN. After a certain tonnage has been imported.

We thought that would save some of the markets for us, but one of the European producers has already gone to a domestic consumer, trying to get business for next year, and he was asked what he would do if this legislation were enacted.

Well, he says, "That does not bother us. We can cut the price $13."

So even if you had that much of an increase in tariff you still could not keep out most of the foreign fluorspar.

In this industry I am certain quotas are the only thing that would work.

Senator WATKINS. In other words, you do not think that we could put the tariff high enough to keep you on a competitive basis with the foreign producers?

Mr. FLYNN. Yes, you could, but it would be an awfully high tariff. Here is what you would do:

The industry has been forced downward over the last few years. Now, we cannot supply all of the domestic requirements tomorrow if all imports were kept out.

Senator WATKINS. Could you at any time?

Mr. FLYNN. We could if we were given 6 months to a year to build back up. For instance, one mill in New Mexico has been dismantled and moved. So that if you put this extremely high tariff on, you would penalize some consumers who had to buy something we could not at once produce.

But if you had a quota, then the domestic producers are competing with each other for that part of the market covered by the quota and the importers would be competing among themselves for the balance, I do not think you would make as big a change in price as you would if you put an extremely high tariff on.

Senator WATKINS. You spoke earlier in your paper about keeping imports out. Do you expect a policy to be adopted which will do anything more than put you on a competitive basis so that you can compete fairly with foreign producers?

Mr. FLYNN. No.

Senator WATKINS. You do not want it all exclusive, an embargo on all imports?

Mr. FLYNN. No, sir; we have not asked for that.

As a matter of fact, the legislation we have proposed in the House would within 2 years' time allow the importers to have 50 percent of the markets and domestic producers to have 50 percent of the market.

Senator WATKINS. Of course, that would raise the price of the imported product up to the same price you would be getting.

Mr. FLYNN. We hope that it would.

Senator WATKINS. Their costs are only one-tenth of yours. There would be an enormous profit to them if you gave them that much of a quota.

Of course, I happen to be one who is in favor of protecting our basic industries that we need for survival and all that sort of thing. I also run into this:

The consumer on the other hand feels that he is being unfairly dealt with if he is asked to pay an enormous price for the product.

Mr. FLYNN. Let us take the legislation which we have requested, Senator. If that were passed and a duty, an additional duty, brought the rate up to $13 a ton on metallurgical-grade fluorspar, the steel industry would pay 1.8 cents per finished ton of steel over and above what they are paying now for fluorspar.

Senator WATKINS. That would give you protection.

Mr. FLYNN. We think it would in metallurgical.

Senator WATKINS. That is the type we produce in Utah.

Mr. FLYNN. That is what you are producing.

Senator WATKINS. They have had a difficult time to get in under the stockpiling program. They have been kept out a long time. However, stockpiling is not the final answer, as we see it. The time comes when the stockpiles are filled and you cannot justify stockpiling any longer. Here it seems to me you have to get a more permanent remedy than that type of thing.

That is a stopgap at best.

Mr. FLYNN. Of course, the only thing you hope is that you do not let these mines shut down while you are trying to provide a permanent remedy.

Senator WATKINS. This House over here, the Senate, is pretty much handicapped when it comes to tariff. We introduce them here and we talk about them in this committee when, as a matter of fact, much of our talk today should have been made to the Ways and Means Committee of the House.

Mr. FLYNN. It was, and I hope I will have an opportunity to say something along the same lines to the Senate Finance Committee.

Senator WATKINS. Well, if you ever get a bill that you can talk on. That is one of our difficulties. If we take it up first over here in the Senate Finance Committee, we offend the Ways and Means Committee of the House and when they get offended they do not want to listen at all. That is one of the real problems in the Senate. We have a difficult time to get an active remedy until the other House is ready.

I certainly think the industry should be given protection, it is just a question now of how we are going to get it done.

The CHAIRMAN. Senator Allott, do you have some questions?

Senator ALLOTT. Yes.

Mr. Flynn, what about the extension of Public Law 733?

Mr. FLYNN. How do you mean, Senator, the effect if it is not extended?

Senator ALLOTT. Yes, what is going to happen to fluorspar if it is not?

Mr. FLYNN. If Public Law 733 is not extended, there will be 3 plants in Illinois close; there will be 2 plants in Colorado close; all fluorspar mining in Colorado will stop.

Senator WATKINS. Is that all acid grade?

Mr. FLYNN. All acid grade under 733; yes, sir.

We have been told by ODM that they expected to stop the purchase of metallurgical grade fluorspar very shortly which gets into Utah and Kentucky.

Senator ALLOTT. For my own information, what type of mining is used on fluorspar in Illinois?

Mr. FLYNN. We have vein type and bedded deposits. We do not have any open-pit operation. It is underground.

Senator ALLOTT. What is the situation in Colorado, for the sake of the record?

Mr. FLYNN. It is practically all underground.

At North Gate there is some open-cut work, but they are going underground with it now.

Senator ALLOTT. Do you think, Mr. Flynn, that maybe part of our trouble is that Congress has never expressed in legislation at what level our mining industry should be maintained as a policy of this country?

Mr. FLYNN. I think that is one of the troubles, Senator.

Senator ALLOTT. In other words, to put it another way, as it applies to your particular mineral, it is a fact that Congress has never said and no one seems to know at just what level fluorspar production should be maintained as an economic necessity for the economic health of this country; is that not right?

Mr. FLYNN. That is true, and I would think that would be one of the best things that Congress could do if they would set this down for each mineral.

Senator ALLOTT. This is also true with respect to tungsten, manganese, lead, zinc, copper, all the rest of them?

Mr. FLYNN. In all the minerals I know of that would go a long way if it were implemented then by the executive department. It would pretty much settle the problem in the industry.

We have never maintained, Senator, that every fluorspar mine in this country should be in operation today or tomorrow or a year from now. Some of them cannot possibly operate for, I would say, 5 years. Demand will not justify their operation until then. We expect 5 years from now that all fluorspar mines will operate.

Senator ALLOTT. I think this is true, and I am sure that you will agree with me that from the arguments that took place in the consideration of 733 last year, not only in the Senate, but in the House and particularly in the House, that we who represent mineral producing States have got to convince the representatives from the other States that there is a certain level of production in the mining industry which must be maintained if we are not going to annihilate completely the mining industry. This is a level which is applicable to the different metals or nonmetals as the case may be.

Senator WATKINS. Will the Senator yield?

Senator ALLOTT. Yes.

Senator WATKINS. That will be necessary before we can even establish a quota. If we understood how much we had to have to be sure of, then we could establish a quota for that amount in this country that this country would be entitled to and then the balance would come from abroad.

Senator ALLOTT. Then you could use the tariff, you could use a direct subsidy, you could use quotas, you could even use the sugar plan, you could use many things if Congress would declare itself at sometime specifically as to what its policy for maintaining the mineral industries of this country was.

I know it is almost impossible to anyone who has never seen a mine to try to convince him that you just cannot go back in the mine 5 years later and turn a tap and start production.

I am sure that we in the West particularly, and I am not eliminating you people from Illinois either, but I am sure that we in the West have never gotten this story over to the balance of the Congress, that if you abandon a mine you not only in many instances lose the mine, it fills up with water, you sometimes ruin it completely, you lose your skilled help, your skilled help disappears, you lose the equipment which goes with the mine, and you have an irrevocable and irreparable loss of a national asset when you are forced to open up mines and then close them down.

This is the story that I think we people who are interested in mines have to get over to the rest of Congress.

Mr. FLYNN. Senator, we had exactly that experience in our own mine in Illinois. There we have a considerable amount of water all the time that you don't have in some of your western mines. We closed down for 7 or 8 months and we lost ore in that mine—we have soft ground there, limestone that is inclined to break off, we lost several thousand tons of extremely high grade ore.

That we will never be able to get. But you put your finger on one thing that has not been generally talked of and that is that there is a very real thing happening to the mining industry in this country today that is not generally realized. You don't have any young fellows going into the mines. We have difficulty when we operate in finding young fellows who are willing to go into the mines.

You cannot very well criticize them because of the instability of the industry. You cannot expect a man to go to work in a mine when he knows he is only going to be able to work for 4 months and 5 months and then a mine will be shut down again for 3 or 4 months.

They will go to other places. It wouldn't be too long until you won't find fellows to operate the mines in this country.

Senator ALLOTT. This tends also, of course, to raise the wages that will have to be paid ultimately and the cost of production.

Mr. REDWINE. May I comment on the colloquy between Senator Watkins and Senator Allott.

Senator, this morning before you came down and joined us, we had testimony from the Commerce Department that they have developed mineral by mineral what our consumptive needs are in estimating consumption.

We have asked from the Department of the Interior, which will come on later, for figures as to productive capacity. Through the

testimony of those two departments—as to consumptive needs and productive capacity—we are hoping that we can get to the very point that you and Senator Watkins were discussiong as to what the spread is between the two.

Senator WATKINS. I have in mind, from what this witness has stated, that a tariff is going to be very unpopular. We might possibly get a quota through but that also would have to start over in the House of Representatives.

It seems to me if we are going to get any relief—we talk about stockpiling and we can extend that again for a while, but eventually you will be in the same position as the sugar industry is in. The sugar industry has a quota system and it is working all right. A few people do not like it; they claim it is a subsidy, and that sort of thing. But if we were in a position that we did not have the quota and our industry were left to face the competition in areas where the foreign labor costs are only one-tenth of what they have here, our sugar industry would soon be done for.

We cannot afford to take a chance on not having any essential domestic industry in this country, because, when the foreign producers have no competition here, they are in a position to form their cartels and to bleed us as they please for the product.

That is just exactly what will happen in minerals and other areas.

Most people have forgotten that if we do allow our industries to go down the drain we are putting ourselves in a position where we will be completely dominated by the foreign producers who can get together—and we cannot control them—and exact the price they want.

Now, this is a matter in our own self-interest.

However, it seems to me that if we are going to get at this problem effectively, we should get action on some kind of legislation in the House of Representatives to protect these essential domestic industries.

I do not think you will get a remedy through the Tariff Commission because it takes too long. It takes too long now to get anything down there, and we might not even get approval unless we amend the law.

It may be amended this year when the Reciprocal Trade Act is up for extension.

I just wanted to make that observation. It seems to me that is the only practical way.

Senator ALLOTT. That is well taken.

Mr. Flynn, I want to ask one more question. I am referring to the hearing held June 14, 1957, and the attachments with respect to fluorspar. I would like to ask you from what countries the fluorspar comes from, I see this—Mexico, 57 percent; Spain, 11; Italy, 10, others, 22.

Is that about right?

Mr. FLYNN. That is about right.

Senator ALLOTT. This makes the statement that exports of fluorspar to the United States is of local importance in Mexico, but is not a major factor in the Mexican economy; is that essentially true?

Mr. FLYNN. That is true; it is not a big item in their overall export picture.

Senator ALLOTT. But of the imports to this country Mexico, with 57 percent, is substantially larger than all the others put together?

Mr. FLYNN. Here is what happened down there, Senator. There was one company that was producing acid fluorspar. They had a mill that they had constructed through financing by way of a stockpile contract. They got their contract and they financed their mill on the basis of the stockpile contract and it was not a particularly large contract.

So about the time that contract was to have ended they came to the Commodity Credit Corporation and started talking about a barter program. One of our fellows happened to be down there and he went by this mill and he saw all this new equipment laying there. He inquired as to what they proposed to do with it.

"Well, we are going to build a new mill." His original capacity was about 20,000 tons. At the time there was a surplus of fluorspar, that is when you considered imports and domestic production.

We found out that he was over to the Commodity Credit Corporation. So we tried to get Commodity Credit Corporation to put into his contract a requirement that he would not expand his production during the period of his contract.

Well, they would not do it. They refused to do that.

As a result, he got commercial contracts for his 20,000 tons output from his existing plants and then constructed an additional plant with a capacity of 70,000 tons a year to fill his barter contract.

Senator ALLOTT. You answered the next question I was going to ask because I do not know whether you remember or not, but I was personally in that situation attempting to stop that, but, unfortunately, we arrived in a sort of after-the-fact basis and we were not able to do anything.

Mr. FLYNN. No; we were not.

But the result was that they now have a capacity for 90,000 tons and the 70,000 tons that is going to Commodity Credit Corporation right now will be available to consumers next spring.

Senator WATKINS. I understood that was to go into the permanent stockpile.

Mr. FLYNN. No, not this particular contract here.

Senator WATKINS. What does Commodity Credit Corporation barter with? What commodities do they trade with?

Mr. FLYNN. Corn, I believe, to Mexico.

Senator WATKINS. Are you in favor of the barter program?

Mr. FLYNN. Not the way it is operated. It could have been a good thing if it had been operated in a different fashion.

Senator WATKINS. How would you suggest that it be operated?

Mr. FLYNN. I would suggest this, Senator: If you can do what you and Senator Allott were talking about a moment ago, if you can determine what level of production you want to maintain in this country and you deduct that from the consumption requirements in this country, that would give you the allowable imports that would not wreck the domestic mining industry.

Then if there is a surplus of production abroad and you really want to prevent any injury to the economy of that country abroad, then let the Commodity Credit Corporation barter if they wish for that surplus production, but don't allow them to go into the market and just upset the thing like they have before by constructing facilities that we don't need.

Senator WATKINS. In the case of that mill you mentioned, did we furnish the money to build the excess capacity?

Mr. FLYNN. We furnished it in this sense of the word, Senator: we gave them a contract with a built-in price to pay for it.

Senator WATKINS. We did not give them any cash?

Mr. FLYNN. Well, we gave them corn. I am not just sure just how those things worked, but they got enough money to pay for their ore and also to pay for their mill.

Senator WATKINS. They got payments in advance on ore?

Mr. FLYNN. I understand that they drew all of the money in advance on that contract.

Senator WATKINS. I will ask again, was it in corn or in money?

Mr. FLYNN. It was a barter of corn for fluorspar.

You see, it operates, as I understand it, through a domestic broker. He takes the corn and sells it and then is supposed to furnish foreign-produced mineral for it.

Senator WATKINS. He does not seli it in this country?

Mr. FLYNN. No; he has to sell the corn abroad.

Senator WATKINS. In the country that is getting the help?

Mr. FLYNN. I think that regulation is in effect now. I am not so sure that it was 2 or 3 years ago. I think at one time he could sell it any place in the work except behind the Iron Curtain.

The CHAIRMAN. Are there further questions?

Senator ALLOTT. I have none.

Senator WATKINS. I have none.

The CHAIRMAN. Thank you very much for your very able statement on the fluorspar industry. I am sure it will be appreciated by the committee and will be given very careful study.

Mr. FLYNN. Thank you, sir.

(The McDougal report referred to by Mr. Flynn is as follows:)

FLUORINE PROGRAM STATEMENT

Robert B. McDougal[1]

Fluorine is a poisonous, violently reactive gas that attacks glass, metals, and even asbestos, and combines with other elements to form highly stable compounds. It is used in the production of aluminum, steel, and high-octane aviation fuels; in refrigerants, propellants, and plastics; in producing glass and enameled products; and in many other uses essential in war and peace.

SUMMARY

Fluorite (CaF_2), commonly known in commerce by its rock name fluorspar, is the principal fluorine mineral. Natural cryolite (Na_3AlF_6) has a higher fluorine content, but its occurrence is almost unique—the only known deposit of commercial tonnage is at Ivigtut, Greenland, and the total supply is relatively small. Phosphate rock often contains 2½ to 3½ percent fluorine and is potentially a large source.

Although the United States has been the world's largest fluorspar producer, domestic consumption far exceeds output, and over half of the supply is imported. Most of the fluorspar produced in the United States is mined in an area along the Ohio River in southern Illinois and western Kentucky. This district also contains the larger part of known domestic reserves. However, capacity in the West has increased in recent years, particularly in Colorado, Montana, and Nevada; and in the future a larger portion of domestic output is expected to be produced in this area. Canada, Germany, Italy, Mexico, and Spain are the principal foreign sources.

[1] Commodity specialist, Branch of Construction and Chemical Materials.

In 1956, the largest use of fluorspar was for production of hydrofluoric acid which in turn was used as a catalyst in the production of high-octane gasoline and to produce synthetic cryolite, aluminum fluoride, and many other fluorine compounds. The second largest use of fluorspar was as a flux in the production of basic open-hearth and basic electric-furnace steel. The third major use was in the manufacture of glass and enameled products. There are no adequate substitutes for fluorine in any of its major industrial uses.

Potentially a large alternative source of fluorine exists in wastes evolved in processing phosphate rock to produce fertilizers and other phosphate products, but to date commercial recovery of fluorine from phosphate rock in forms suitable for widespread industrial use has been on a relatively small scale.

The outlook is for increased consumption of fluorspar, particularly as a source of fluorine for the chemical industry. A long-range expansion in domestic output also may occur, but producers are confronted with major cost and quality problems in competing in the present market.

Some producers in the Illinois-Kentucky district must pump large quantities of water from the mines, adding substantially to production costs. Other problems include the need for more efficient recovery at reduced costs, increased recovery of byproducts, processes for utilizing lower grade and complex ores, the development of wider markets for flotation concentrates, and the need for additional information on reserves.

The long-range program of the Bureau of Mines should include continuation and improvement of its usual services, such as the compilation and dissemination of technical, statistical, and economic information on fluorine, cooperation with other organizations that have an interest in this commodity and the special factfinding service required for the conduct of Government programs. The Bureau should continue to examine and evaluate fluorspar deposits, and conduct research on mining, milling and processing methods, byproduct recovery and substitutes.

BACKGROUND

Size and organization of the industry

There are approximately 100 fluorspar mines in the United States and about 15 mills. Most of the mines produce only a few hundred tons per year, selling their output directly to consumers or to the firms that operate mills. The bulk of the domestic production is contributed by about 10 companies. These mines could produce more abundantly if their economic situations were to improve. Shipments of domestic fluorspar in 1956 totaled 330,000 tons valued at $14 million.

Imports in recent years have become an increasingly important factor in the industry. In 1956, imports totaled 491,000 short tons valued at $11 million, whereas 181,300 tons entered in 1951 and 2,100 tons in 1942. Mexico has recently been the principal source with Canada and several European countries shipping substantial tonnages.

Most of the domestic fluorspar producers are independent operators, but in the acid segment of the industry there are four major firms which produce for their own consumption. In 1956 these four firms accounted for about 25 percent of the total output.

Geographic distribution of the industry

In the United States a small area in Hardin County, Ill., along the Ohio River accounted for about 54 percent of the total domestic shipments in 1956. Montana, supplying about 18 percent, and Colorado were the second and third largest producing States, respectively. Smaller tonnages were shipped from mines or mills in Kentucky, Nevada, Tennessee, and Utah. Mills in Delaware processed foreign ore and in 1957 a mill was installed in Texas for the same purpose. Table 1 shows the principal producers of finished fluorspar in the United States.

Production of fluorspar in Canada is centered chiefly in the St. Lawrence district of the Province of Newfoundland. There is a small fluorspar output from the Madoc area in Ontario.

The fluorspar mines in Mexico are scattered widely in the States of Chihuahua, Coahuila, Durango, Guerrero, Mexico, San Luis Potosi and Sonora. A large part of the fluorspar has been produced by hand labor chiefly from surface workings, and has been hand sorted to yield a premium product. However, during the past 3 or 4 years flotation plants and a heavy media unit have been installed.

The fluorspar deposits in West Germany are in Baden and Bavaria. The mines in Baden are near Pforzheim and Schwarzwald. The principal Bavarian mines

extend about 12 miles from Schwarzenfeld to Nabburg, but the Stulln-Nabburg-Woelsendorf area supplies the greater part of the output. The West German fluorspar mines are well developed and are served by modern milling plants.

Fluorspar occurs in the Italian Provinces of Lombardy, Trento, and Venetia, and on the island of Sardinia.

In Spain the principal mines are in the Provinces of Barcelona, Cordoba, Gerona and Oviedo. The Caravia and Collada mines in the Province of Oviedo and the Osor mine in the Province of Gerona are the largest producers.

The entire world supply of crude natural cryolite comes from Ivigtut, Greenland. The Danish State owns the deposit and the Kryolitselskabet Oresund Ald, Copenhagen has the mining concession. There are no commercial reserves of cryolite in the United States but synthetic cryolite is produced at East St. Louis, Ill., and at Hurricane Creek, Ark.

TABLE 1.—*Geographic distribution of principal producers of finished fluorspar in the United States*

Producer	Location of milling plant		Chief products [1]
	County	Nearest town	
Colorado:			
General Chemical Division, Allied Chemical & Dye Corp.	Boulder	Boulder	A.
Ozark-Mahoning Co	do	Jamestown	A.
Do	Jackson	Cowdrey	A.
Delaware:			
St. Lawrence Fluorspar Corp	Newcastle	Wilmington [2]	A.
Ozark-Mahoning Co	do	do.[3]	A.
Illinois:			
Aluminum Company of America	Hardin	Rosiclare	A.
Frazer & Hettiger	do	do	M.
Mackey-Humm Fluorspar Mining Co	Pope	Golconda	M.
Minerva Oil Co	Hardin	Cave in Rock	A, C, M.
Do	do	Elizabethtown	A, C, M.
Ozark-Mahoning Co	do	Rosiclare	A, M.
Rosiclare Lead & Fluorspar Mining Co	do	do.[4]	C, M.
Kentucky:			
Calvert City Chemical Co	Crittenden	Mexico	A.
J. Willis Crider Fluorspar Co	do	do	M.
Kentucky Fluor Spar Co	do	Marion	C, M.
Roberts & Frazer	do	do	C.
Montana: Cummings-Roberts	Ravalli	Darby [5]	M.
Nevada:			
J. Irving Crowell, Jr	Nye	Beatty [5]	M.
Kaiser Aluminum & Chemical Corp	Mineral	Fallon	A.
Texas: Reynolds Metals Co	Maverick	Eagle Pass [3]	A.
Utah:			
Bell Hill Mining Co	Juab	Delta [5]	M.
Chesley & Black	do	do.[5]	M.
Willden Bros	do	do.[5]	M.

[1] Abbreviations: A, acid grade; C, ceramic grade; M, metallurgical grade.
[2] Milling plant only, processes imported fluorspar.
[3] Custom drying plant only for drying imported filter cake.
[4] Mill only, mines closed March 1954.
[5] Location of mine, no mill.

Fluorspar consumption was reported in 33 States in 1956; 3 States—Illinois, Ohio and Pennsylvania—used 34 percent of the total.

Definition of terms, grades, and specifications

Grades of fluorspar.—Fluorspar commonly is marketed in three grades—metallurgical, ceramic, and acid. Acid grade contains the highest percentage of CaF_2, metallurgical grade is the lowest, and ceramic grade is considered to be in between.

Metallurgical grade may be sold in the form of gravel, lump, artificial pellets, or fine flotation concentrate. The lowest acceptable metallurgical grade normally contains 60 percent effective calcium fluoride. The effective value is determined by subtracting from the contained CaF_2 2.5 percent for every percent of SiO_2 present in the complete analysis.

Ceramic-grade fluorspar specifications vary considerably according to the requirements of individual buyers. It usually is finely ground and a representative sample might analyze 95 percent CaF_2 with the bulk of the remainder being SiO_2 and $CaCO_3$. A limit usually in placed on Fe_2O_3.

Acid-grade fluorspar should contain a minimum of 97 percent CaF_2 and most specifications contain limitations on SiO_2, $CaCO_3$, and sulfide sulfur.

Chemical and physical requirements of acid-grade fluorspar are set forth in National Stockpile Material Purchase Specifications P–69a, dated February 13, 1952, by Defense Materials Service, General Services Administration.

National Stockpile Purchase Specification P–69b–R, dated May 22, 1957, contains requirements for metallurgical-grade fluorspar being acquired by the Defense Materials Services of General Services Administration for the stockpile.

Technology

Geology.—In the Illinois-Kentucky district the country rock is limestone, shale, and sandstone. Fluorspar occurs as veins along faults ranging in thickness from a mere film to a width of more than 30 feet and in extensive flat-lying replacement-type deposits in limestone. Residual deposits resulting from weathering of fluorite-bearing veins also are fairly common in the district and often indicate the presence of vein deposits at greater depth (4) (26) (27).[2]

In the Western States fluorspar occurs under a wide variety of conditions—as fillings in fractures and shear zones forming more or less well-defined veins and as replacements in the country rock. Much occurs in igneous formations (3) (9) (10) (20) (22) (23) (24).

At Ivigtut, Greenland, the cryolite is associated with pegmatite within an intrusive mass of porphyritic granite. Associated minerals are silica, fluorspar, galena, pyrite and siderite (16).

Mining.—Fluorspar mining is, in many respects, similar to the mining of metalliferous deposits in steeply dipping veins or in flat lying deposits. Mining is done by shafts, drifts, and opencuts.

Shaft mines differ greatly in size, capacity, methods of working, and efficiency. At prospect shafts not over 50 feet deep the simplest mining method may be employed with little other hoisting equipment than a hand-operated windlass and and a bucket. At small mines more than 50 feet deep single-compartment shafts with wood headframes are used; the ore is loaded at the face and trammed by hand on narrow-gauge tracks to the shaft, through which it is hoisted by single-drum hoists powered by gasoline engines.

At larger mines the main shafts usually include two hoisting compartments and a manway compartment containing a ladder, air and water pipes, and electric-power conduits. Steel headframes generally have been adopted, and hoisting is done with double-drum hoists with skips or cages. Mining methods follow the practice of metal mines, adopting the method best suited to conditions. Top slicing, cut-and-fill, and shrinkage and open stoping are among the methods commonly used. Bedded deposits are usually worked by a room-and-pillar system. Some of the larger mines are extensively mechanized, using diesel-powered hauling and loading equipment (1) (17) (21).

At many fluorspar mines water pumping is a major element in the mining operation. Large quantities of water enter the mines in the Illinois-Kentucky district through channels in the limestone and from the Ohio River. At the Rosiclare mine for example, the flow of underground water into it was at a rate of 7,000 gallons per minute. The Crystal mine in the Cave-in-Rock area in Illinois has a water problem. When the "Big Sink," a landlocked area covering about 800 acres, rises to a high level because of excessive rains, water seeps into the mine from innumerable underground crevices and fissures and causes it to flood.

Milling.—Although some domestic fluorspar is sold with little or no processing after mining, most crude ore requires beneficiation to yield a finished product. Milling practices range from rather simple methods, such as hand sorting, washing, screening, and gravity separation by jigs and tables, to sink-float and a froth-flotation processes. Most of the domestic output is produced by sink-float, flotation, or a combination. These processes permit utilization of lower grade ore; recovery is much more efficient and the finished product of higher quality. Also, the flotation process permits recovery of the lead and zinc minerals often associated with the fluorspar ores (1) (7) (27).

To a large extent the selection of a milling process depends on the character of ore to be treated and the type of product desired. Some highly disseminated ores can be treated successfully only by flotation, since fine grinding is necessary to liberate the component particles. Flotation also is commonly used where a pure product of fine particle size is desired, such as ceramic and acid-grade

[2] Figures in parentheses refer to items in the bibliography at the end of this exhibit.

fluorspar (18) (29). The heavy-medium or sink-float process is usually employed where a coarse product, such as metallurgical-grade gravel is desired and enough concentration can be achieved without fine grinding (15). Some producers use both processes in combination, producing gravel products by sink-float and treating undersize from the heavy-medium mill by flotation or using sink-float to produce a preconcentrate, which is then used as feed for the flotation plant (5) (6). Flotation concentrates are pelletized at one mill for use as metallurgical fluorspar (14).

Flotation and other mineral-dressing techniques are employed to treat cryolite.

Chemical processes are used to recover fluorine from phosphate rock. At present the greater part recovered is in the acidulation step in the production of ordinary superphosphate. The fluosilicic acid is sold or used to prepare salts such as sodium silicofluoride and ammonium, magnesium, and zinc fluosilicates. A small tonnage of fluorine in the form of synthetic fluorspar was recovered by the Tennessee Valley Authority from stack gases evolved in processing phosphate rock. The recovery process consists in absorbing the fluorine, which is present as hydrogen fluoride, in a bed of lump limestone at temperatures above the dew-point of the stack gases. The calcium fluoride reaction product separates from the limestone lumps in the form of fines; portions of the bed are withdrawn from the tower at intervals and screened to remove the fines, and the oversize (partly reacted limestone) is recycled to the tower with fresh limestone (11) (12) (13).

Uses

Fluorine is used principally in the form of fluorspar, cryolite, hydrofluoric acid and fluosilicates.

Until recently the largest use of fluorspar has been as a flux in the manufacture of basic open-hearth, basic electric furnace and Bessemer steel. Many other metallurgical operations including the production of iron castings, ferroalloys, and nickel and its alloys; the melting and casting of aluminum and magnesium; the smelting of secondary metals; and the manufacture of fluxing compounds utilize small tonnages of fluorspar. Metallurgical operations consume fluorspar in gravel form and flotation concentrates have been utilized to a very limited degree. The use of pelletized flotation concentrates has not attained wide acceptance in the metallurgical industries, and this seriously limits the market for flotation concentrates of subacid grade.

The second major use has been in the production of hydrofluoric acid, an essential raw material in the manufacture of synthetic cryolite, and aluminum fluoride for the aluminum industry and in many other applications in the chemical industry. In 1956 consumption of fluorspar in the production of hydrofluoric acid exceeded that used in the production of steel. Acid-grade spar requirements of the aluminum industry have expanded rapidly in recent years, paralleling the expansion in aluminum production. Cryolite, which serves as an electrolyte in the electrolytic reduction of alumina, is required in large quantities to fill reduction cells when new aluminum-production units are started; and in regular reduction operations cryolite consumed must be replaced by additional cryolite or aluminum fluoride. Based on 1951 data, it was estimated that 47 pounds of cryolite and 58 pounds of aluminum fluoride were consumed per ton of virgin aluminum produced. The largest use of cryolite is in the production of aluminum. Smaller quantities are used in abrasives, insecticides, glass, and enamel.

Hydrofluoric acid is used by industry as a source of fluorine for the production of refrigerants and propellants, the fluorocarbon plastics and other fluorine compounds; as a catalyst in the prduction of high-octane aviation fuels; in etching and polishing glass, pickling steel, cleaning metal castings, and enamel stripping; as a laboratory reagent; and for many other industrial uses. An important use for hydrofluoric acid is in the field of atomic energy. Its use here is to produce uranium tetrafluoride from uranium oxide, the raw material, and is itself used in the preparation of uranium hexafluoride. The most volatile compound of uranium, uranium hexafluoride, has been extensively utilized in the separation of uranium isotopes by thermal diffusion.

The third major use of fluorspar is for ceramic purposes in the manufacture of opal and flint container glass and as an ingredient in enamels for coating steel and cast iron. Ceramic-grade material also is consumed for welding-rod coatings, fiber-glass production and as an additive to brick clays.

Small quantities of ceramic or acid-grade fluorspar also are consumed by the magnesium industry.

Small quantities of clean, virtually colorless, and flawless crystalline fluorspar have been used in lenses or prisms of microscopes, telescopes, and spectroscopes, but synthetically grown crystals have largely displaced fluorite in these uses.

Markets for the fluosilicates are relatively limited. Fluosilicic acid is used as a disinfectant in the brewing industry, as a preservative in electroplating, as a concrete hardener, and in the manufacture of silicofluoride salts. Sodium silicofluoride is used for fluorination of community water supplies. Sodium silicofluoride and ammonium fluosilicate are used in insecticides, laundry applications, fluxing, ceramics, and casting light metals. The magnesium and zinc fluosilicates are used as concrete hardeners and the magnesium salt also finds application in magnesium foundries.

Byproducts and coproducts

Lead and zinc and minor quantities of other metals, such as silver, cadmium, and germanium, are often recovered as byproducts or coproducts of fluorspar. The value of lead and zinc produced in the Illinois-Kentucky area in recent years has been substantial. These byproducts are important factors in the economy of many fluorspar operations.

Substitutes

During World War II topaz, ilmenite, aluminum dross, and salt were studied as substitutes for metallurgical-grade fluorspar, but none were as effective. Bauxite has been used as a flux in the open-hearth steel plant at Port Kembla, Australia; and, although it was cheaper, it was only about one-third as effective as fluorspar. In the past several years the production of a special flux, employing fluorspar as a base, has increased somewhat; and many iron foundries that formerly used fluorspar alone are now using this flux.

The petroleum industry has two alkylation processes for producing high-octane components for gasoline; one uses hydrofluoric acid and the other sulfuric acid. The sulfuric acid process can be used in place of the hydrofluoric acid process, however, the equipment for one acid process does not readily lend itself to the use of the other acid.

At present there is no satisfactory substitute for fluorspar in the manufacture of hydrofluoric acid.

Synthetics

The bulk of the cryolite consumed in the United States is in the form of synthetic cryolite made by reacting sodium aluminate with hydrogen fluoride obtained from acid-grade fluorspar.

Secondary sources and recovery

At some aluminum plants fluorine compounds are recovered and reused in the aluminum-reduction process. This practice is growing and is expected to become an increasingly important factor in the market.

Several thousand tons of concentrates are recovered annually in the Illinois-Kentucky district from waste dumps of earlier mill operations.

Reserves

Fluorspar reserves in the United States were recently estimated by the United States Geological Survey at 22.5 million short tons containing more than 35 percent CaF_2 or the equivalent value in combined fluorspar and metallic sulfides (*8*). About 61 percent of the 22.5 million tons was measured and indicated ore and the remainder inferred ore. An additional 12 million tons of lower grade material containing 15 to 35 percent CaF_2 was estimated. These reserve figures are larger than previous estimates made by the United States Geological Survey because better reserve information is now available and substantial quantities of ore have been found in the last few years.

Presently known reserves could support mine production for 30 years at the 1951–55 rate of about 750,000 tons of crude ore annually.

Although recovery from many of the lower grade deposits is not economically feasible at the present time, the presence of other valuable minerals and factors such as advantageous geographic location and favorable mining conditions, have made it possible to mine some deposits containing less than 30 percent CaF_2.

The geographic distribution of the higher grade reserves, expressed in terms of crude ore, is shown in table 2. In general the major reserves are concentrated in the major producing districts, the Illinois-Kentucky district accounting for about 54 percent.

TABLE 2.—*Estimated reserves of higher grade[1] fluorspar in the United States as of October 1956, by regions, expressed in terms of short tons of crude ore*

Region	Measured and indicated	Inferred	Total	Approximate percent
Illinois, Kentucky	8,100,000	4,000,000	12,100,000	54
Colorado, Idaho, Montana, Utah, Wyoming	4,500,000	3,700,000	8,200,000	36
Arizona, New Mexico, Texas	800,000	700,000	1,500,000	7
California, Nevada, Washington	400,000	350,000	750,000	3
New Hampshire, Tennessee, Alaska		10,000	10,000	
Total	13,800,000	8,760,000	22,560,000	100

[1] Fluorspar containing at least 35 percent CaF_2 or equivalent.

Source: U. S. Geological Survey.

There are very large reserves of fluorspar in many foreign countries, notably Mexico, Canada, Germany, Italy, Spain, and southwest Africa; but statistics on them are sketchy or unavailable. Total North American reserves are extensive. Mexico, the leading foreign supplier, is believed to have major reserves of high quality ore. Recent discoveries in Coahuila and Chihuahua of large numbers of additional deposits are evidence of the abundance of fluorspar in northern Mexico. Reserves in Newfoundland have been estimated by some investigators at several million tons (16).

Reserves of crude fluorspar containing more than 35 percent CaF_2 in Western Europe have been estimated at 13,200,000 short tons, while reserves in the Soviet Union and its satellites may exceed 5.5 million short tons. The bulk of western European reserves are said to be in Italy, Western Germany, Spain, and the United Kingdom (19).

The United States has enormous reserves of phosphate rock—at least 13 million long tons—and some authorities have estimated its fluorine content to be equivalent to about 900 million tons of fluorspar. However, recovery of this fluorine or any part of it depends upon the quantity of phosphate rock mined and sold, upon the treatment processes to which the phosphate rock is subjected, and upon further development of methods of recovering the fluorine in the desired commercial forms.

No estimate of the cryolite reserves in Greenland is available, but recent reports indicate that exploration has failed to develop appreciable new reserves, and the deposit may be approaching depletion.

Sources and adequacy of statistical information on the commodity

Annual and quarterly data on production and shipments of fluorspar are obtained from domestic producers by the Bureau of Mines. Over 95 percent of the consumers of all grades of fluorspar are canvassed quarterly. A biennal consumer canvass covers virtually 100 percent of the known consumption. All known importers of fluorspar are canvassed annually for imports and sales by quantity and use.

As difficulty has been encountered in determining fluorspar grade and use patterns, changes recently have been made in the canvass to obtain more nearly complete and accurate information. In the consumption canvass data is being obtained on the grade of fluorspar—acid, ceramic, or metallurgical—being consumed in specific industries. In the canvassing of steel plants and iron foundries which is done by the Bureau of the Census, similar detail by grade is not obtained. A truer picture of fluorspar consumption could be presented if this detail were available.

Changes in the producers canvass provided a more positive picture on the grade of ore being mined, processed in the mills, and the grade of finished product being shipped to consumers.

There is a lack of statistical information on the recovery of byproduct flourine from phosphate rock processing plants and secondary fluorine recovery at aluminum reduction plants.

World production and trade data are compiled by the Division of Foreign Activities, Bureau of Mines. United States exports and imports are obtained from the Department of Commerce.

Production, consumption, and foreign trade

The growth of the fluorspar industry in the United States during the present century has been rapid, particularly since 1941. Production increased from an annual average of about 40,000 short tons in the decade 1900–09, to an average of about 323,000 tons during the decade 1940–49. During the same period, average annual imports increased from about 15,000 tons to 57,000 tons. From 1950 to 1956 domestic production has fluctuated from 347,000 tons in 1951 to a low of 245,000 tons in 1954.

Domestic fluorspar production in 1956 (shipments from mines and mills) totaled 329,719 short tons. Of this Illinois contributed 178,254; Montana 59,775; Kentucky 14,865; Utah 10,581; and Nevada, Colorado, and Tennessee together 66,244. As a whole domestic fluorspar has been supplying a declining fraction of the market in recent years. Difficulty in meeting specifications required by buyers and the competition of foreign fluorspar are among the factors which have influenced trends in the industry.

In recent years imports have been greatly stimulated by the strong demands of the consuming industries, and the requirements of the national stockpile.

Imports, since 1952, have exceeded domestic production and in 1956 a new high of 490,742 short tons was recorded. Mexico supplied about one-half of the total fluorspar imported. Canada, Germany, Italy, and Spain supplied all but a small part of the remainder. European fluorspar generally enters at Philadelphia; Canadian at Buffalo, Cleveland, New York, and Philadelphia; and the Mexican at Douglas, Ariz., and Brownsville, Eagle Pass, El Paso, and Marathon, Tex. Imports, by country of origin, for 1947–51 (average), 1952–56, are shown in table 3.

As a means of maintaining domestic production capacity, in July 1956, Congress passed Public Law 733 authorizing the Department of the Interior to purchase four strategic minerals, including acid-grade fluorspar from domestic mines for stockpiling. The General Services Administration was authorized by Interior to purchase 250,000 short dry tons of newly mined domestic acid-grade fluorspar at a price of $53 per short dry ton by December 31, 1958. The program made slow progress at first, but after the specifications were modified in January 1957, the volume of purchases increased. The Commodity Credit Corporation of the Department of Agriculture is currently engaged in exchanging 100,000 tons of surplus wheat for Mexican fluorspar under terms of an agreement of June 1955. This fluorspar is also being purchased and stockpiled by the General Services Administration.

TABLE 3.—*Fluorspar imports in 1947–51 (average) and 1952–56, by countries*

[In short tons]

Countries	1947–51 (average)	1952	1953	1954	1955	1956
Canada	15,588	18,675	22,020	34,755	39,010	36,966
France	1,144	1,120	1,164	221	----------	----------
Germany	16,014	60,451	36,366	35,684	25,672	21,043
Italy	7,651	30,403	52,218	47,779	47,477	56,347
Mexico	65,337	175,102	190,413	134,650	197,493	318,575
Spain	20,515	59,687	52,286	39,430	56,769	57,800
Others	127	7,065	5,102	801	----------	11
Total	126,376	352,503	359,569	293,320	363,421	490,742

Consumption of fluorspar in the United States has been increasing rapidly, principally as a result of growth in the requirements of the steel and aluminum industries, and increased use of fluorine chemicals. Consumption statistics by uses and geographic regions are shown in tables 4 and 5.

TABLE 4.—*Fluorspar (domestic and foreign) consumed in the United States, 1947–51 (average) and 1952–56*

[In short tons]

Use	1947–51 (average)	1952	1953	1954	1955	1956
Hydrofluoric acid	114,587	178,267	223,359	225,096	248,218	289,523
Glass	35,824	33,837	32,955	29,746	32,482	30,861
Enamel	7,555	5,205	5,863	5,737	6,003	5,442
Steel	232,208	272,476	287,607	196,067	251,239	264,434
Iron foundry	5,534	7,005	12,432	8,778	15,563	13,738
Ferroalloy	2,719	2,952	5,224	3,240	4,293	4,601
All other	11,527	20,455	19,358	11,710	12,463	12,755
Total	410,152	520,197	586,798	480,374	570,261	621,354

In November 1956, the Office of Defense Mobilization canceled a twice previously delayed hearing on a petition filed by the domestic fluorspar industry under the national security section (sec. 7) of the Trade Agreements Extension Act of 1955. This hearing was intended to obtain information which would assist the Director of Defense Mobilization in determining whether fluorspar imports threaten to impair the national security by making it difficult for the producers to maintain their properties in operating condition. The inquiry was indefinitely suspended for a period in which the effect of the purchase program under Public Law 733, which was passed July 19, 1956, could be determined.

TABLE 5.—*Fluorspar (domestic and foreign) consumed in the United States by region in 1956* [1]

[In short tons]

Geographical region and State:	Consumption
New England (Connecticut, Massachusetts)	1,800
Middle Atlantic (Delaware, Maryland, New Jersey, New York, Pennsylvania, and West Virginia)	200,800
South Atlantic (Georgia, North Carolina, South Carolina, and Virginia)	1,400
East South Central (Alabama, Kentucky, and Tennessee)	35,900
West South Central (Arkansas, Louisiana, Oklahoma, and Texas)	93,100
East North Central (Ohio, Illinois, Indiana, Michigan, and Wisconsin)	221,700
West North Central (Iowa, Kansas, Minnesota, and Missouri)	8,500
Mountain (Colorado and Utah)	21,200
Pacific (California, Oregon, and Washington)	32,400
Undistributed [2]	4,500
United States total	621,300

[1] Consumption estimated from sample canvass of consumers.
[2] Estimate for consumers not canvassed in 1956.

Self-sufficiency

Until recent years the United States, the largest consumer of fluorspar, had been able to provide the bulk of its needs from domestic mines and mills; however, recently the consuming industry has expanded at a rapid rate and imports now provide over half of the total fluorspar consumed. As consumption is expanding more rapidly than domestic production the United States has become less self-sufficient in fluorspar supplied, although ample reserves are available for development.

Strategic considerations

The strategic stockpiles are intended to supplement domestic production in time of emergency, when some foreign sources would not be available to this country. Ample stocks of acid grade fluorspar have been accumulated but difficulty has been encountered in efforts to build metallurgical stocks.

Defense program

The Defense Minerals Exploration Administration will contribute 50 percent of approved costs on exploration programs for fluorspar, under authority of the

Defense Production Act of 1950, as amended. During 1956, one exploration contract was executed at a cost of $10,992 to the Government. Up to June 1957, DMEA had executed two additional contracts with cost to the Government of $8,906.

The Office of Defense Mobilization announced in July 1956 a premium price purchase program for metallurgical-grade fluorspar. Originally prices were to be $39.50 per ton in Illinois-Kentucky and $33.50 in the Western States based upon an apparent historical price differential. Following protests from western producers ODM and GSA on January 7, 1957, established a single price of $39.50 throughout the country for 72½ effective units CaF_2. Metallurgical-grade fluorspar of lower effective CaF_2 content is proportionately lower in price.

Prices and costs

Market price quotations on domestic and foreign fluorspar are regularly published in E. & M. J. Metal and Mineral Markets. In the Oil, Paint and Drug Reporter cryolite prices, which indicate the high and low offerings, are quoted. Actual prices are negotiated between the buyers and sellers on the basis of specifications.

Table 6 shows the average selling prices to specified industries. The average selling price of all grades of domestic fluorspar shipped reached an alltime high in 1954 and prices have declined sharply since that time.

TABLE 6.—*Selling prices of domestic fluorspar shipped to specified industries, 1947–51 average, 1952–56* [1] *per short ton, f. o. b. mine shipping point*

Year	Hydrofluoric acid	Glass	Enamel	Steel	All industries (including exports)
1947–51 (average)	$43.12	$38.00	$40.57	$30.44	$35.53
1952	58.07	44.40	48.84	35.29	46.35
1953	59.54	46.38	54.36	35.45	49.48
1954	58.30	41.97	52.35	28.67	50.21
1955	56.54	39.80	40.39	25.88	45.04
1956 [1]	56.06	41.14	42.11	27.67	43.24

[1] Preliminary values.

Taxes

Producers are granted a depletion allowance of 23 percent on domestic production, and of 15 percent on foreign production. Under the Defense Production Act the accelerated tax amortization grants totaled $4,282,000. This program closed December 31, 1955.

Tariff

Tariff rates in effect in May 1957 on fluorspar containing more than 97 percent CaF_2 was $1.875 per short ton ($2.10 per long ton) and less than 97 percent CaF_2 was $7.50 per short ton ($8.40 per long ton). The ad valorem equivalent on more than 97 percent CaF_2 is 6.1 percent and 56 percent on less than 97 percent CaF_2

There is no tariff on cryolite.

In September 1955, the Tariff Commission conducted investigations to determine the effect of acid-grade imports upon the domestic industry. The Commissioners in their report rendered a split 3-to-3 decision on the findings of their investigation. Three Commissioners concluded that the domestic acid-grade fluorspar industry was threatened with serious injury and will suffer from increased imports and recommended withdrawal for an indefinite period the tariff concessions granted on June 6, 1951, in the General Agreement on Tariff and Trade. The other three Commissioners found that the domestic industry was not threatened with serious injury and that no withdrawals of tariff concessions were necessary (26).

President Eisenhower on March 20, 1956, accepted the position of the three Commissioners who found that no basis exists for granting escape-clause relief.

Transportation

Fluorspar is shipped by a variety of methods. Crude fluorspar may be hauled from the mines by truck to the mill or processing plant, and, in this crude state it may be shipped by rail in open gondolas or hopper cars directly to the consuming industry. Finished fluorspar in the form of flotation concentrates

may be shipped to consumers in 100-pound bags (4 bags to a barrel) in boxcars or in bulk in covered hopper cars. In the Illinois-Kentucky district several producers maintain loading facilities on the Ohio River for barge shipment to the Pittsburgh, Pa., area.

Fluorspar operations in Montana are 30 miles east of the railhead at Darby necessitating haulage by truck over this distance. Railsidings have been extended into storage areas of mills by most of the fluorspar producers in the Illinois-Kentucky district, and in Colorado.

Mexican fluorspar may be hauled across the border at points in Arizona and Texas by rail or truck. From Brownsville, Tex., it may go by barge to Chicago or Pittsburgh. Imports from overseas are carried by oceangoing freighters to coastal ports. Long-distance haulage is commonly required between producing and consuming centers, and consequently this is a major factor in determining the competitive positions of the various sources.

Research

Fluorspar research in industry usually is directed toward improvement of mining and milling processes, reducing the cost of these processes, and reserve studies.

The Bureau of Mines is engaged in several projects involving research on the recovery of fluorspar and other fluorine compounds from phosphate rock and low-grade or complex fluorspar ores. Occasionally fluorspar deposits are examined and studies made of mining methods and costs. Fundamental data on fluorine compounds are accumulated and published as a part of the Bureau's research on the thermodynamic properties of mineral materials.

OUTLOOK

Fluorine consumption in the next 10 years is expected to increase substantially. Aluminum and steel production probably will require more fluorine as will expanded output of fluorine chemicals. It is likely that more cryolite will be reclaimed at aluminum plants and reused. Perhaps the greatest potential for expansion is in the relatively new field of fluorine chemicals. Fluorine compounds, such as freon, genetron and isotron refrigerants, propellents, and fluorocarbon compounds, are being used in increasing quantities in a wide variety of applications.

The production of high octane aviation fuels, utilizing hydrofluoric acid for catalytic purposes, is expected to increase. A recent article presented an optimistic outlook concerning the use of fluorine and its compounds as high energy oxidizers in rocket propellents (2).

A long range increase in the domestic fluorspar production may take place, but increased output from the domestic mines is contingent upon competition from imported fluorspar, price structure, tariff regulations, and the solution of a number of technical problems.

Increasing commercial recovery of fluorine from waste gases evolved in processing phosphate rock in the form of synthetic cryolite, fluorspar, or other compounds suitable for industrial uses is another development that is anticipated. This is expected to become a substantial source of cryolite but probably will not become a major factor in the fluorine industry in the next few years.

PROBLEMS

Long-term fluorine commodity problems were overshadowed in 1957 by the immediate problem of adjustment of domestic and free world foreign mining and milling capacity to a stable level in harmony with peacetime and defense requirements.

Although adequate resources are known the domestic deposits commonly have fewer advantageous characteristics than do many of the high-grade surface deposits in foreign areas which contribute major tonnages to the present market. Consequently, the domestic output of fluorspar is hampered by high costs of exploration, development, mining, and processing.

Complexity of some of the domestic ores, stringent product specifications, and difficulties encountered in the utilization of low-grade ores are all major fluorspar problems. Production at some domestic mines is seriously handicapped by water-control problems.

The recovery of large tonnages of fluorine-bearing materials, now being wasted at plants that process phosphate rock and complex metallic ores, is hampered by lack of sufficiently efficient and low-cost methods.

In times of shortage there is a great need for adequate substitutes for fluorspar.

A continuing long-term problem of the fluorspar industry is the maintenance of a satisfactory reserve position, particularly as fluorspar reserves are difficult to measure.

The inadequacy of available statistical data for the guidance of Government and industry is a growing problem as the complexities of fluorine production and consumption increase. Several portions of the statistical pattern are either lacking or cloudy.

AVENUES OF ATTACK ON PROBLEMS

There are several possible approaches to the problem of industry adjustment to the current market requirements, no one of which is wholly satisfactory and all are more or less supplementary: (*a*) Continued market control by Government, with progressive withdrawal from such control; (*b*) stockpiling of surplus supplies; (*c*) import control. Technologic solution of this problem will require time and a great deal of research, but pursuit of this course is most desirable because it will place the industry in a firm competitive position.

Research on methods of exploration would improve the precision and completeness with which domestic reserves can be found and measured. Encouragement of exploration by individuals and firms through direct and indirect Government assistance could contribute to the maintenance of an adequate domestic reserve position.

Research on mining methods could reduce current cost disadvantages. Study of underground water-control methods would yield exceptional benefits to some of the fluorspar producers if pumping costs were minimized thereby.

The development of improved methods of recovering fluorine minerals or compounds from low-grade ores, complex ores, and phosphate rock would minimize waste and improve the competitive position of domestic operations.

The development of substitutes containing little or no fluorspar could reduce the requirements for metallurgical-grade material. Greater recovery of synthetic cryolite as a byproduct in phosphate rock processing and aluminum manufacture might reduce the need for natural cryolite.

Expansion of the Bureau's statistical canvasses to include additional data on byproduct and secondary recovery and on other phases of the industry would materially improve the commodity information available.

PROGRAM FOR THE BUREAU OF MINES

A fluorspar program for the Bureau of Mines should include—

1. Study of methods for improving milling and processing practice with a view to such objectives as greater utilization of low-grade and complex ores, more efficient flotation and other recovery processes and reduction of unusable fines and other milling losses.
2. Study of mining methods and costs, with research directed toward the solution of special problems, such as water control.
3. Continued investigation of methods for the recovery of fluorine from phosphate rock and other byproduct and secondary sources.
4. The continuation and improvement of the services regularly provided by the Bureau, such as the collection of statistics, issuance of market information, technical and economic publications, cooperation with technical societies, and service on interdepartmental committees.
5. Examination and evaluation of occurrences of fluorspar, and other fluorine sources.
6. Fundamental studies of the properties and utility of fluorine minerals and compounds.
7. Investigation of possible substitutes for natural cryolite and metallurgical-grade fluorspar.

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The CHAIRMAN. We will now take a recess until 2 o'clock.

Senator ALLOTT. Mr. Chairman, before we recess, awhile ago I noticed Mr. Joseph Little of Denver, a former Democratic State chairman, a classmate of mine in college, who I believe is supposed to testify for his newly formed organization at 2 o'clock.

I, of course, would like to be here and will be here, but it happens that there are two amendments to this highway bill in which I am very greatly interested, and I may have to be on the floor at that time.

In the event I cannot be back here at that time, I would like this to offer as an introduction of my fellow Coloradan and I hope the

chairman will be kind enough to inform him of the reason for my absence, together with my introduction.

The CHAIRMAN. I will be very glad to do that. We regret very much you are unable to be here personally. Thank you.

We will now recess until 2 o'clock.

(Thereupon, at 12:10 p. m., the committee was recessed, to reconvene at 2 p. m. the same day.)

AFTERNOON SESSION

The CHAIRMAN. The committee will please come to order.

The first witness this afternoon will be Joseph F. Little of Denver, Colo.

Will you identify yourself to the reporter.

STATEMENT OF JOSEPH F. LITTLE, DENVER, COLO.

Mr. LITTLE. I have been a metal-mining-property owner and operator, and a mining attorney for 25 years. I have served on many resolutions committees at conventions of the Colorado Mining Association. I am a member of the Western Governors Conference Minerals Advisory Committee, under appointment by Governor McNichols, and I am chairman of the Natural Resources Committee of Colorado and of the trustees of the American Metal Mine Owners.

That is an organization formed—composed of the actual owners of metal properties.

The CHAIRMAN. I could qualify as a member of that organization. I own a lot of metal mines out there, but all I get out of them is the right to pay taxes every year.

Mr. LITTLE. That is what happens to all of us, Senator. That is one of the reasons we have organized it, to see if we cannot do something.

While it is difficult to obtain an exact count, it is safe to say that over 80 percent of the metal mines which were operating in this country in 1940 are now closed. True, there has been an increase in uranium mining, but even that branch of the industry is now in trouble.

For the first time in its life, the historic mining town of Leadville, Colo., is without a major mining operation.

Just as an aside, may I state that Leadville and the surrounding Lake County at one time had production in 1916, their peak year, had production of over $16 million in just a small area. Today it has no operations whatever. It is living because of the fact that Climax is still operating, although on a short week, and many miners live in Leadville and travel back and forth.

Metal mining and milling machinery has either been junked or is fast deteriorating because of rust and idleness. It no longer pays second-hand machinery dealers to move items of what were once pieces of valuable and necessary mining equipment. Most mineowners consider the situation so hopeless they no longer keep their mines in repair. Workings are filling with water. The sulfuric acid in mine waters is eating out nails in timbering, as well as rails and pipe.

As a result, timbers are collapsing and passageways are caving in. Waste material from stopes is clogging mine workings. Mine build-

ings are sagging and falling. Many of them are located in out-of-the-way places where they cannot be devoted to other uses.

Worst of all, the American metal miners are being scattered to the four winds. Employees still able to work have gone to other industries. Age has taken its toll of others, who are now no longer physically able to mine or teach mining operations to metal-mining apprentices.

The prostrate condition of our metal mining industry must be seen to be believed. Once prosperous communities are now ghost towns. Mining properties which produced millions and which are known to have large reserves, now have that abandoned look so typical of the general condition of the industry.

Some years ago we cleaned out approximately 1,000 feet of a drift or passageway in a closed-down mine which I owned. These drifts are large enough to accommodate the transportation of miners, ores, and equipment. Naturally, they are no bigger than are necessary for such work. As a rule, no more than 2 men can work at 1 time in the breast of a drift.

I won't describe the work required in opening that drift; it meant removing a tangled, broken mixture of rock, mine timbers, pipe, and wiring. It was a tedious backbreaking job, requiring months of labor. At that time we had a number of advantages. We could call upon trained and experienced men. The price we received for our ores was somewhat commensurate with the cost of production.

Today, we have neither the men nor the incentive to open up any properties, and the economic loss to the Nation in payrolls, taxes, machinery, equipment, and buildings, is almost incalculable. Much worse is the condition of thousands of little mineowners, who have expended a lifetime of labor and savings in developing a mining claim, only to see it become worthless.

Based upon tax schedules, it is estimated that there are over 200,000 individually owned, patented, or deeded mining properties in this country. The owners of these properties have been paying taxes year after year, and yet, by law, they are denied the right of realizing any income from these properties.

Very few of our once productive mines are worked out. Virtually every mine that was operating in 1940 has been closed by some hostile act of the Congress or the executive department of the Federal Government.

I cannot emphasize that too much. I think if the metal-mining industry were relieved of some of the unnecessery restrictions placed upon it, it would be flourishing today. I think the history of metal-mining industry is the very hostile, very adverse attitude of some of the divisions of our Federal Government.

As above indicated, the executive and legislative branches of our Federal Government must share the blame for the deplorable condition of our metal-mining industry. Here are but a few examples of the discrimination that has been practiced against the metal miner.

The United States Department of Agriculture has bartered surplus farm products to foreign countries in return for cheaply mined lead, zinc, and other ores and minerals.

Only last week the United States Senate, by the slender margin of 44 to 39, defeated a move by Senator Humphrey to require the Secre-

tary of Agriculture to barter up to a billion dollars' worth of farm surpluses for foreign metals, minerals, and other materials.

The Federal Government has financed, fostered, and encouraged cheap foreign and ruinous competition with domestic producers of metals and minerals.

Through lend-lease, the Federal Government provided the moneys with which foreign mineowners developed their properties.

Through lend-lease, our Federal Government equipped these foreign mines with the most modern and efficient mining and milling machinery.

Through the point 4 program, our Federal Government provided foreign mining and milling operations with the latest scientific and technological know-how.

The financial assistance thus given to foreign competitors by the Federal Government was not conditioned upon the nations in which such competition resided, enacting social legislation similar to that provided in this country, which in turn would have raised the standard of living in such nations, eliminated the necessity for further American handouts, and provided additional markets for our manufactured products.

By this financial and scientific assistance, our Federal Government preferred the African or South American miner, whose wages vary from 50 cents to $1.50 a day, over the American metal miner, earning $14 to $16 per day.

The American base metal miner is prohibited by law from selling the gold recovered from his base metal ores to any purchaser except the United States Mint, at a price fixed by law in 1934, which price has never been changed although metal-mining costs have doubled and tripled in that time.

In addition to operating with cheap labor, the foreign producer of lead, zinc, copper, and other base metal ores has the additional advantage over his American competitor of being able to sell the gold contents of such ores in that market in which he receives the highest price for gold.

Federal laws authorize the United States Mint to pay for the silver content of base metal and other ores the sum of 90.5 cents per ounce. This silver is then coined by the mint into dimes, quarters, half dollars, and dollars, at the rate of $1.2929 per ounce, yielding a profit to the United States Mint, at the expense of the silver miner, of approximately 28 cents per ounce.

A few years ago, the General Services Administration was authorized to contract with tungsten producers for the purchase of their tungsten ores. On the faith of these contracts, hundreds of tungsten miners expended thousands of dollars in opening up and developing tungsten ore bodies, only to have the Congress of the United States repudiate the contracts and refuse to appropriate the money with which to buy such ores.

I might say that was after these miners had spent thousands of dollars—and I was one of them—in opening up tungsten properties, and this was during the Korean war when tungsten was deemed vital. We were put to this expense in opening up these properties and then we were cut off just like that without a chance for a return on our investment.

The small uranium miner is also the victim of the very same treatment.

No other commodity in the United States has been subjected to the vicious discrimination and repression as is now accorded by law to gold.

Let me say that most of these metallic veins are base metal veins which contain minor quantities of precious metals such as gold and silver. If they are gold and silver veins, they frequently contain substantial quantities of lead and zinc. So what we do for any one of these metals, we do for the production of all of them.

The CHAIRMAN. That has been true in all of the mines in Montana. In fact, the big copper mines in Butte were originally gold and silver mines until they got down to water. The mine owners thought they were ruined when they ran out of gold, but the hill has been going ever since and it is one of the richest ore deposits in the world.

Gold, which is the side issue of silver, is a great help to many of the mines all over the country.

Mr. LITTLE. That is right. You probably will recall Robert Young one time advertised that a hog could be shipped across the United States without changing cars, but the American citizen could not. The same thing applies to the next statement.

Unlike the people of Hong Kong, West Germany, France, Holland, the Philippines, and many others, the American people are denied the right to possess, buy, and sell gold.

The very possession of gold, except for specimens in minute amounts, is illegal.

Contrary to the natural and inalienable right of the American citizens to possess gold, the law authorizes its confiscation and provides fines in double the amount of value of such gold. Those who drafted this infamous statute overlooked one point; the fines are based upon the 1934 value of gold; namely, $35 an ounce, not its present value.

The American laborer by law is granted a floor under his daily wages, which floor has been revised upwards as the cost of living increased. There is no such floor for copper, lead, zinc, fluorspar, tungsten, manganese, uranium, molybdenum, and other metals and minerals, the prices of which not only fluctuate with the remorseless requirements of the law of supply and demand, but are further depressed by cheap foreign competition, financed by our Federal Government with taxes supplied in part by the victims of this competition.

The American farmer has the benefit of legislation promoting parity between prices of farm and nonfarm commodities, price supports, and other laws. There is no parity for lead, zinc, copper, and other metals and minerals, and the inflexible price for gold of $35 an ounce was fixed in 1934, when wheat was selling for 85 cents a bushel. Today wheat is selling for approximately $1.80 a bushel, while the price of gold is still $35 an ounce.

The United States not only buys gold at $35 an ounce, it sells the gold at $35 an ounce from its monetary stocks to goldsmiths and other industrial and artistic users of gold. At the expense of the American gold miner, the gold manufacturing industry not only obtains its raw materials at 1934 prices, but the price of that raw material is guaranteed by the Federal Government.

Incidentally, there is no restriction on the price at which the gold industry sells its finished product to the public.

For years the American public has been led to believe that the 22 to 23 billion dollars in gold mentioned in the periodic reports of the United States Treasury was the unencumbered property of the United States, and the gold backing for outstanding currency issued by this country. Of this 22 to 23 billion dollars in gold, $15 billion must be held to cover foreign commitments for which payment in gold can be demanded.

In addition, the law requires $25 in gold back of each $100 in Federal Reserve notes and deposits in Federal Reserve banks, or a total of over $12 billion in gold. The obligations of the Federal Reserve bank in that connection are around $50 billion, maybe a little bit over, according to the last Federal Reserve Bulletin. Twenty-five percent of that would be $12.5 billion in gold.

If foreign claimants against our gold collected their claims in full in gold, the United States would be short approximately $4 billion.

True, we can repudiate our monetary agreements, just as we did our tungsten and uranium contracts, but if we honor our obligations, our remaining gold falls far short of supporting our outstanding currency and deposits. And yet, with few notable exceptions, every gold mine in this country is now closed.

Again, officials of the Treasury Department have intimated that they are maintaining the price of gold and preventing fluctuations in foreign and domestic markets. In fact, one Treasury Department official even threatened in 1948 that if Congress restored free trade in gold, the Treasury would be compelled to sell its gold on the open market to keep the price at $35 an ounce.

I have a copy of that letter in my file, if the committee would like to see it. Not very often does a department of the executive department threaten to undo an act of Congress.

Pick's World Currency Report, in the February 1958 issue of the Engineering and Mining Journal, quotes the price per fine ounce of gold contained in gold coins, at the free or black market value of the United States dollar, in many markets of the world. This price varies all the way from $38.50 in Buenos Aires to $57.50 in Bombay, and these quotations are as of January 31, 1958.

Another bit of discrimination affecting metal mining, but of which the metal miner is not the only victim, is the practice by which the Treasury Department delivers gold in settlement of trade balances with foreign nations, based upon a value of $35 an ounce. The foreign recipient of this gold may then sell it in one of the other gold markets of the world for a much higher price than $35 an ounce, and thus not only profit on the initial transaction, but make an additional profit on the sale of such gold.

The above list is far from complete, but time prohibits further enumeration of the discriminations and injustices perpetrated on the American metal miner by his National Government.

What will be the result of this treatment?

Results if present condition continues: During the last war, and despite the fact that we had a trained force of metal miners and the equipment and the know-how to produce the much-needed strategic metals and minerals, nevertheless, we still had to import lead, zinc, copper, and other ores to augment our domestic production. Many ships carrying such ores were sunk by German submarines.

Today we have not the men, the equipment, nor the know-how to provide these ores and minerals. True, we have some stockpiles, but it would take months and even years to reopen and equip closed-down mines, to unwater and retimber these mines, and to train the crews to operate them.

We cannot rely upon our foreign sources because Russia has a much larger submarine fleet than that enjoyed by Germany in 1940–45, and our chances of survival in a war with Russia would be sunk along with the ships attempting to convey ores to this country.

Even peacetime presents its problems. There are no worldwide antitrust laws. Outside of this country, it is the rule that markets be parceled out among various producers, competition be stifled, and the purchaser charged all that the traffic will bear. We paid through the nose for natural rubber for automobile tires and other products made of rubber, until the advent of synthetic rubber forced down rubber prices to a more realistic level.

In this Nation with its hundreds of gadgets made of copper, lead, zinc, and other metals, we could not long maintain our standard of living if we were forced to pay the exorbitant prices fixed by a zinc trust or a lead or copper combine, and maintained and enforced because our domestic industry no longer provided the competition to keep prices down.

Because of its past treatment, no domestic concern will have the heart to revive mining even if such a metals trust or combine permitted a resumption of mining in this country through a failure to manipulate prices to prevent such revival.

I have already mentioned the results of our national mining policies on the mining industry itself, its personnel, and the communities in which it operates. The continuance of these policies can mean only utter ruin and desolution to many once flourishing areas of our country.

What are the remedies?

1. Because of the extreme urgency, Congress should immediately provide an adequate duty upon imports of foreign lead, zinc, copper, uranium, fluorspar, tungsten, manganese, and other metals and minerals, sufficient to equalize the costs of mining such ores and minerals in foreign countries and the cost of mining such ores and minerals in the United States. The amount of this duty should provide for the difference in wages, payroll taxes for social legislation such as social security, unemployment benefits, and the like.

I am making that statement, as I say, as a temporary proposition. I do not think that that is the answer to it, I don't think that stockpiling is the answer. There has been some talk about stockpiling, it took the foreign metals off the market. It enabled the domestic supply to supply the demand and it increased the prices of those domestic products.

Certainly it is an unhealthy situation where the Government has to go in and stockpile. The time will eventually come, as it did in tungsten, when the stockpile will be so large that the purchase will be cut off again and that would apply to any other metal, lead, zinc, or anything else. We have to find some permanent solution that will work. To date, very frankly, metal mining has had too many ups and downs. It has gotten to the point where I don't know what would

happen if the Federal Government were to go to the tungsten miners and say you open up, we need some stores.

I think most of them would want some ironclad guaranty before they did anything because, frankly, they have been flimflammed so much. They go to work, spending their money to open up the mine; by the time they begin realizing on it, the program is halted. There is no use trying to keep up a mine between demands. When they go to reopen again, they have to close down gold mining to begin with, and the same kind of work I have mentioned before, if you have ever tried to clean up an unused strip, as you certainly know.

2. As a permanent program, the principle of import quotas and payments to domestic producers now enjoyed by American producers of wool and sugar should be applied not only to lead, zinc, and copper, but also to tungsten, fluorspar, molybdenum, uranium, and similar metals and minerals.

One time back in the early thirties, the sugar industry was in about the same shape as our metals are in today. I do not think it is necessary to go into the principles of the way the sugar and wool programs work, but the fact of the matter is that they do work, they do protect our local industries, and at the same time they do provide for foreign trade.

Most base metal veins contain gold and silver, and most gold and silver veins contain base metals. In addition, the number of gold mines owned or operated by the little mineowner or mine lessee greatly exceeds that of all other mines. These small gold and silver mines are the backbone of the metal-mining industry in many Western States. They provide the trained miner and the know-how necessary to the operations of our larger more prominent properties.

3. Without cost to our Federal Government, and with great benefit to this country, Congress can remedy a grave injustice and insure the future prosperity of our metal-mining industry by restoring to the American people their natural and constitutional right to acquire, possess, and dispose of gold, regardless of whether newly mined or not, by permitting the gold miner to sell newly mined gold for the best price obtainable, and by permitting the United States Treasury to continue to buy all gold offered at $35 per ounce, and by prohibiting the United States Treasury from disposing of any of its gold stocks to private industry and requiring that all gold held by the Treasury be used solely for monetary purposes.

I will be frank to state that if we were to stop the United States Treasury selling its gold monetary stocks to any gold manufacturer at the 1935 price, and told the Treasury they would have to use this stock for monetary purposes only, and allow the gold miners to start up again, I think the price of gold would probably be quite a lot higher than $35 an ounce. That would certainly increase the value of the gold now held by the Treasury; it would bring it up to a fair price based upon the law of supply and demand, and I think that provision alone would reopen many of our closed-down mines.

4. Since the United States mint unjustly profits at the expense of the miner by purchasing silver from the metal miner at 90.5 cents an ounce, and then making it into coins having a value of $1.29 an ounce, the metal miner should receive the full price of $1.29 an ounce for silver sold by him to the United States mint.

That is particularly important for the lead and zinc miner because most lead and zinc veins contains substantial amounts of silver.

I am sure that other remedies have been mentioned at this hearing. The situation is critical. Nothing deteriorates so rapidly and so completely as a closed-down metal mine. The existence of this basic industry is so necessary to the welfare, peace, and prosperity of this Nation that every remedy which can restore metal mining to its place in our economy should be carefully considered and the most effective should be speedily adopted.

The CHAIRMAN. Thank you very much for your statement. I think you made very many valuable points.

Mr. REDWINE. Mr. Chairman, may I ask some questions of this witness?

The CHAIRMAN. You may.

Mr. REDWINE. Mr. Little, are you familiar with Senate Joint Resolution 16, introduced by the chairman of this committee, calling for a study of gold?

Mr. LITTLE. No, I am not.

Mr. REDWINE. We will not ask him to comment on it then, Senator.

The CHAIRMAN. Do you have a copy of the bill there?

Mr. REDWINE. Yes, I do.

The CHAIRMAN. You might give him a copy of the bill.

Mr. REDWINE. I will give him a copy of the bill before he leaves, Senator, and we will ask him to supply a comment for the record on how he feels about that particular bill.

(The comments were later supplied for the committee files.)

Mr. LITTLE. The very fact that you are asking for a study in my mind means another delay and this industry cannot afford any delay. I think practically any man who is familiar with the gold situation unless they are connected with the United States Treasury or the Federal Reserve bank will tell you that what gold mining needs more than anything else is freedom from the restriction and freedom from the unfair competition supplied by the United States Treasury itself.

The production of gold in this country is about one-half of the demand. I think the latest figures I have seen on the matter—there is about $50 million worth supplied against $100 million worth of demand. If the American gold miner could sell his product to the industry and he did not have to compete with the United States Treasury, and if the Treasury was not continually keeping the price down to almost confiscatory levels, many gold mines would reopen.

Let me say further that gold mining is primarily the occupation of the small man, a small plant. You will find very few gold mines that have more than 15, 20, 25 miners employed. The very fact that it is a study, I think means it is just another delay.

Mr. REDWINE. Mr. Little, you are appearing here in several capacities. One, representing a newly formed organization called the American Metal Mine Owners?

Mr. LITTLE. Yes.

Mr. REDWINE. Will you give us a list of the principal officers of that organization, please?

Mr. LITTLE. I am the chairman. Former Governor Dan Thornton of Colorado is the vice chairman. Richard Ayres is secretary-

treasurer. The trustees are composed of those three and a man by the name of Roy Burkette, who is a rather prominent metal mine operator; Mike Kloonan, who is a fluorspar operator near Walton, Colo.; Mr. Appellert, State representative and mine operator from Rico, Colo.; John W. Minster, former attorney general of the State of Colorado; Ben Coxton, who was former secretary to Governor Adams, and also president of the Imperial Mining Co. in Alamos.

Mr. REDWINE. Mr. Little, is this new organization associated with or supplemental to the Colorado Mining Association?

Mr. LITTLE. It is neither associated with it except that most of our miners are also members of the Colorado Mining Association, and I imagine that we would pursue parallel aims towards the same goal.

Mr. REDWINE. Mr. Little, the Colorado Mining Association is supported in part, is it not, from a State fund?

Mr. LITTLE. That is right. I am not sure about that. The Colorado Mining Association, as I understand it, is supported by dues from its members. I think along with that, and very closely associated with it, is the State Metal Mining Owners.

Mr. REDWINE. Mr. Little, is it contemplated that this new organization will also share in this mining fund, or will that remain with the Colorado Mining Association?

Mr. LITTLE. As far as I know, whatever moneys the Colorado Mining Association and/or the American Metal Mining Fund have, it will continue to be their sole, separate property and income.

First, let me say this: As I mentioned in this statement, there must be over 200,000 individuals in this country owning metal mining properties either deeded or patented. Very little attempt has ever been made to get this group organized for their own welfare. The fact of the matter is that I think that is one of the things wrong with it. If they had been organized, some of the discriminations practiced against them would never have taken place.

We organized the American Metal Mine Owners and from the list I gave you, you can see a lot of us have had quite a little to do with politics.

Mr. REDWINE. May I interrupt you at that point?

Mr. LITTLE. Yes.

Mr. REDWINE. From news reports, however, although many of you have had a great deal to do with politics, it is completely nonpartisan, is it not, sir?

Mr. LITTLE. It is not nonpartisan; it is bipartisan.

Mr. REDWINE. I meant bipartisan.

Mr. LITTLE. The metal mining does not recognize any differences between Republicans and Democrats, and we have a lot of Republicans as well as Democrats who are interested in it. But this organization was predicated on the major premise that the miners' troubles in this country are chiefly political, and they are.

Mr. REDWINE. Will you explain that?

Mr. LITTLE. In other words, it was a political act that closed the gold mines in 1942. It was a political act that picked the price of gold in 1934 at $35 an ounce. It is a political act that it has been kept that way ever since.

It was a political act that began bringing in a flood of cheaply mined lead and zinc.

The CHAIRMAN. When you say "political act," what do you mean; a legislative act?

It was not one political party?

Mr. LITTLE. No; I mean politics in the sense that it was an action by some branch of the Government or some Government organization or official.

I can change that, but I usually regard anything, any action that is done by a government or anybody in the course of governmental position is a political action in the sense that it emanates from a governmental source.

I am speaking of politics in a very basic generic term.

The CHAIRMAN. Of course, many acts of the Government have neither the support of the Democrats nor the Republicans.

Mr. LITTLE. That is right.

The CHAIRMAN. You cannot call it a political act then.

Mr. LITTLE. Let me say I am speakng of it from this respect: When I mention political, I mean governmental.

The CHAIRMAN. Go ahead.

Mr. LITTLE. It was a governmental act that flooded this country with cheaply mined lead and zinc ores from foreign countries and broke the market. In brief, I guess we have had that difficulty for almost a century. We feel that the only way to remedy it, to bring back metal mining, is first of all—as the Senator said, he has owned mining property for years and has been paying tax on it for years and with no benefit. There are hundreds of thousands of Americans like that.

I feel that if the American people knew the cause of the mining depression in this country, perennial mining depression in this country, if we could apprise them of governmental actions which were favorable or hostile to them, in other words, an informed public is a public that can remedy situations once they have the information as to the cause of it.

We feel that by doing that, we will be able to create a much more favorable attitude toward mining. Most of all, we can inform the American people of the necessity of the maintenance and welfare of one of the most basic industries.

Mr. REDWINE. Mr. Little, apparently you are very familiar with the mining situation all over the country?

Mr. LITTLE. Yes.

Mr. REDWINE. Is it your thinking that there should be in each of the mining States separate organizations of a mining association and a producers association such as has been formed recently in Colorado?

Do you think that is needed elsewhere, also?

Mr. LITTLE. I feel this way: I feel the more organizations and groups you can get working toward a list of the mining properties, the better off metal mining will be, and the sooner its condition will be improved.

Mr. REDWINE. What, if any, liaison has been developed between your newly formed organization and the Colorado Mining Association?

Mr. LITTLE. None so far.

You must realize that when we are talking about American Metal Mine Owners, that is something that has just recently been started, and a lot of things remain to be done which time has not permitted.

Mr. REDWINE. Would you care to comment on your plans for liaison between the groups, Mr. Little?

Mr. LITTLE. Before the corporate papers were filed, I went to Mr. Palmer, the executive vice president of the Colorado Mining Association, and told him what we had in mind, and suggested that we work very closely together.

Mr. REDWINE. Mr. Chairman, I would like to make this statement: The reason for these questions is that by your direction I have made quite a study of this new organization and its relationship to the regular association. I just wanted it as a matter of record.

I want to thank Mr. Little very much for his cooperation in this matter in explaining just what is the relationship.

The CHAIRMAN. Both organizations are working for the same results?

Mr. LITTLE. That is right.

The thing is that the American Mining Congress and the various mining citizens in the States are composed mostly of operators, men like yourself. You have a host of people who do not feel that they should belong or have not belonged to these associations composed of active operators and owners of producing properties. You have that big dormant group and they are the group that has to be appealed to, they are the group that we have to get after if we are to have any public force back of the metal miner.

Now I might add one other point.

As I say, you have a lot of prestige, you have been active in politics—active in government, I might say—and since many of these matters are governmental matters, matters of governmental policy, we feel that those men are much more suited to deal with than, for instance, a mining engineer who has devoted all his life back up in the hills some place and operated. He might be a fine man on metallurgy and technicalities of mining, but when it comes to public information, when it comes to discussing governmental policies, he is completely lost.

Mr. REDWINE. I have no other questions.

However, I think that Mr. Little can be congratulated on his statement and his very fine cooperation with the committee, and we are delighted to have him with us, Mr. Chairman.

The CHAIRMAN. Thank you, Mr. Little. We certainly appreciate your appearance.

Mr. LITTLE. Thank you.

Mr. REDWINE. Mr. Chairman, may we ask that Mr. Lunsford Long be the next witness?

The CHAIRMAN. Mr. Long.

STATEMENT OF W. LUNSFORD LONG, CHAIRMAN OF THE BOARD OF TUNGSTEN MINING CORP., NORTH CAROLINA

Mr. LONG. Mr. Chairman, I am chairman of the board of Tungsten Mining Corp., which operates a tungsten mine in North Carolina. I am also president of the Tungsten Institute, which is a research organization devoted to an attempt to devise new and increased use for tungsten. I am also chairman of the board of Manganese, Inc., a corporation which is conducting manganese operations in the State of Nevada.

My life for the last 15 years has been almost entirely devoted to manganese and tungsten production in this country, and my company

has grown during that period into the largest individual domestic producer of tungsten and manganese.

I feel that I know something about both of these industries, but I want to confine my appearance here today to the usbject of the condition of the tungsten mining industry in this country. I leave the manganese situation to others who are perfectly competent to present its needs to you.

I am very happy indeed to be given this privilege to appear again before this committee. Our unhappy condition cannot be ascribed to this committee, nor for that matter to the Senate of the United States. If the judgment of this committee and the action of the United States Senate had been followed, the tungsten industry today would have been continuing and going along on an even keel in this country, but the House of Representatives decided not to go along with appropriations which did pass the Senate.

So we find the domestic tungsten-producing industry today in this unhappy situation that there are only 3 producers of tungsten left out of 206 who supplied tungsten.

The CHAIRMAN. In the country?

Mr. LONG. Yes. We are operating in North Carolina on a 4-day-a-week basis. The Union Carbide Co.'s operation in the High Sierras in California is also operating in a limited way, and my associate, Mr. Segerstrom over here is operating his Nevada mine in a limited way. They are the only three. Climax Molybdenum Co. is also producing a small amount of tungsten as a byproduct of the molybdenum operations at Climax, Colo. So far as we know, these are the only sources of tungsten production now going on in this country.

I think that no more serious disservice could have been done the safety of this Nation than what has been done in the destruction of the industry producing the metal which has the highest temperature resistance of all the metals, and for that matter the highest temperature resistance of any element except carbon in the whole list of the elements. Carbon is the only substance which exceeds tungsten in its ability to resist heat.

While the Government of Russia has published recently in the Soviet news the statement that in their new 5-year plan, upon which they are just entering, that they are increasing their capacity to produce tungsten concentrates by 57 percent, we, on the contrary, by failure to make appropriations, have consigned the tungsten-producing industry in this country to oblivion and are becoming again totally dependent on imports.

We have been operating in North Carolina at a loss for a year. How long we will continue to be able to do that, how long we should do that, as a matter of business acumen, is a question.

We have been operating there for 15 years, and we have never suspended. In 1949 when a similar situation to the one that faces us today faced us in the tungsten industry, we did not shut down then. We operated straight on through and accumulated our own stockpile. We subsequently sold that stockpile to the Government on a break-even basis when the first program was adopted by the United States Government to keep the tungsten industry alive, which was a decision by the Munitions Board in the late 1940's to buy a year's production from the tungsten mines. All of us then sold, and we broke even.

On a production of $1,700,000 worth of tungsten, we made $16,000. We built over this period of 15 years a very efficient organization. We have developed a very large mine. We are going to try to preserve that mine regardless of whether we have to shut it down or not. We will try to keep it in a standby condition. We hope we will be prepared financially to do that.

We know that the time is going to come, and I personally think it is going to come very soon, when the supposed large stockpiles of tungsten which we have wisely created here in the hands of the Government are going to be insufficient for the new needs that tungsten is going to be called upon to supply.

On that theory, we have been holding together our organization at a loss and we propose, at least for the present, to try to continue to do so until we see what action is finally taken at this session of Congress.

The CHAIRMAN. There are extensive deposits of tungsten in other parts of the country.

Mr. LONG. That is right. In 1955, we produced a million units of tungsten in the United States amounting to a little over 15 million pounds of pure metal.

Mr. REDWINE. Mr. Chairman, may I interrupt at this point?

The CHAIRMAN. Certainly.

Mr. REDWINE. What are the deposits, Mr. Long, in Montana? How extensive are they there?

Mr. LONG. Not very extensive in Montana, so far as we know.

The CHAIRMAN. And they are low grade, too?

Mr. LONG. No; some of them are high grade.

The CHAIRMAN. And these deposits are in veins, are they not?

Mr. LONG. In a number of instances in this country they occur as open-cut formations. You mine it like you would a quarry in some of the deposits.

Our deposit in North Carolina is in quartz veins in granite. Most of the deposits in this country are veins descending to great depths. There have been found deposits like the great deposits in Idaho that saved the situation in the beginning of World War II. It took care of the situation which confronted us when we were in desperate need for tungsten at the outbreak of World War II.

But we are sitting right on the edge, in my opinion, of the development of new uses of tungsten which will solve the high-temperature needs of this era.

In that connection, I want to read to you and put in the record, if you will, a few recent very authoritative statements in that connection. The first one I want to read is a statement of the President, as reported in the New York Times on Thursday, October 10, 1957, in a press interview. I read you this as a statement the President himself made, talking about the failure of our missile development program:

> I can say this: I wish we were further ahead and knew more as to accuracy and to the erosion and to the heat-resistant qualities of metals and all the other things we have to know about. I wish we knew more about it at this very moment.

He was speaking, no doubt, with the advice of his technical assistants, upon the necessity of our knowing more about heat-resistant materials to cope with the situation that is presently confronting us.

Next I would like to read to you the statement of Lt. Gen. C. S.

Irvine, Deputy Chief of Staff for Materiel of the Air Force. General Irvine said:

Clearly then, improved use of engineering manpower and capabilities is an essential forward step in the production of air vehicles . But beyond this step lie many problems which must be solved if we are to progress as rapidly as necessary in the efficient design of future air vehicles. Foremost among these problems, we must find ways of developing and using new materials capable of withstanding sonic vibration and high temperatures.

This is the problem that is confronting the Air Force.

I would like to read to you a recent statement taken from the U. S. News & World Report of November 15, 1957, by Dr. Theodore Von Karman, senior missile adviser to NATO. This is what he has to say on the subject:

I do not think we are far behind. The United States has been slow, however, in exploring new fuels and materials for rocket construction. The materials we are now using in rockets cannot stand very high temperature. New materials are needed, and we have been a little slow in exploring these possibilities, such as new metals, plastics, and ceramics.

Now, that is from the chief missile expert of the NATO, our allies in Europe.

This is from an interview with Admiral Rickover in the U. S. News & World Report on March 21, 1958, last Friday——

Mr. REDWINE. Will you identify Admiral Rickover and comment on his accomplishments?

Mr. LONG. Admiral Rickover is generally known as the man who designed and made possible the first atomic submarine we built, and as one of the foremost engineers in the utilization of atomic energy.

Mr. REDWINE. Thank you, sir.

Mr. LONG. Admiral Rickover says this:

When you talk about hydrogen power you are talking about very high temperatures. We will have to develop means for handling those high temperatures. We have not made much progress in metals for high temperatures. Over the last 10 years we may have gone up another 200° F. or so, but, for H-power, temperatures as high as those of the sun are involved, millions of degrees.

These are current comments on the situation that confronts us in the high-temperature field, from the President himself, and from the man best qualified to have an informed and accurate opinion about this matter as currently reported.

Now, Mr. Chairman, I want to call specifically to your attention in this same connection an excerpt from the report to the Honorable Gordon Gray, Director of the Office of Defense Mobilization, by the Special Stockpile Advisory Committee. That Committee was comprised of men who have had great experience in Government, and, like these gentlemen whom I have been quoting, all of them have access to the secret information to which people like me do not have access.

So, they have better information than the ordinary man has from which to form accurate and reliable judgments.

Now, this Committee, looking into the stockpile, making a serious, careful, long study and report, makes this recommendation on page 8 of its report dated January 28, 1958:

HIGH-TEMPERATURE AND OTHER SPECIAL-PROPERTY MATERIAL

It is not possible to know with certainty at this time which of the high-temperature or other special-property materials will be in greatest demand for specific applications as new techniques develop from research and practice.

Known world supplies of many of these materials are limited. Several, but not all, are on the stockpile list. Up to now, conventional practices have resulted in only relatively small uses of many of these materials. However, if they become important not just as minor alloys but as metals or mixtures composed exclusively of the materials themselves, demand could increase sharply. The Committee recommends that a mechanism be established to appraise the possible effects of resarch and development activities on requirement for high-temperature and other special-property materials. Instead of relying on past use patterns, possible needs 5 to 10 years hence must be surveyed and stockpiles built up as need is indicated.

Thus the Committee clearly recommends that special treatment be given to the high-temperature materials.

In that connection, I wish to say, Mr. Chairman, that in the work of the Tungsten Institute, which continues at Stanford Research Institute in Menlo Park under the direction of R. H. Thielemann, we believe we are making very real progress in the development of a tungsten-base alloy which will meet the high-temperature needs of our advanced jet turbines and of our missile and rocket development.

We have already developed and there has been put in use one of our alloys which Mr. Thielemann testified about when he was here before this committee 2 years ago.

That is an alloy known as WI–52, which has raised the operating temperature of a jet turbine from an effective 1,650° F. to 1,800° F.

That alloy has 12 percent tungsten and after having been tested in the engines by Pratt & Whitney and by General Electric, has been adopted as being the best presently available alloy for use in the hot spots of the blades and vanes of these turbines.

That alloy will enable an engine to run at 1,800° F. instead of 1,650° and last just as long as it used to last at 1,650°.

Mr. REDWINE. Mr. Long, translating that into increased payload or speed or whatever advantage it gives, what does it mean?

Mr. LONG. This makes possible roughly something like a third more power developed by the same engine.

The CHAIRMAN. I have not heard any mention of titanium. Is that not supposed to be one of the greatest heat resistant metals?

Mr. LONG. No, sir. Titanium is not one of the high-temperature metals. The only four high-temperature metals that we have, that are available in any quantity at all, are molybdenum, columbium, tantalum, and tungsten. They are the four principal ones.

Titanium cannot stand up and its melting point is far below the melting point of these other metals.

When you get into really high temperatures, titanium, just from its nature, its own melting point, cannot operate in that field.

The CHAIRMAN. They were talking about titanium a few years ago.

Mr. LONG. Yes, but they were talking about high temperatures then, Mr. Chairman, which are considered low temperatures today.

What was a high-temperature metal alloy 5 years ago is now a low-temperature metal.

The thing that we have got to develop is something that will enable us to operate our engines and our rockets at very high temperatures. We are hoping and believing and expecting that we are shortly going to be able to come forth with such an alloy with tungsten as the base.

Now, it seems to me that when we have in tungsten a known quality as being the most heat resistant of all metals, it would be the one to

which we would normally turn first to meet high-temperature requirements.

Now, that has not been the case for this reason: You are in an entirely new world when you get over 1800° F. There are no machines that will roll, there are new mechanisms to develop, there is no known metallurgy. You are a pioneer. You are in a new world and you are working at elevated temperatures where nobody has ever worked before, where mechanisms have not been developed, where reactions are not known.

That is why we are pioneering. This work has been going on at Stanford in a small way by the cooperative effort of the tungsten producers who pooled their resources and put up the money to carry on this work. We are hopeful that having carried it as far as we have, having borne the fruit it has borne and having made this splendid contribution to the improvement of our aircraft engines, that the United States Government will now come along and back up our work by giving us, through research and development, funds from the Air Force or from the Interior Department or from somewhere, real assistance to carry forward further and more quickly this work which is being done at Stanford Research Institute.

We are making all our information available to the interested agencies of the Government and laying before them the need for increased expenditures so that we can bring about this situation more rapidly.

Now, that is one aspect of tungsten that I wanted to bring to your attention. There are one or two others I want to bring to your attention also.

I have been very much concerned for some years to try to find out if I could, what the tungsten production was in Russia. I have been told constantly up until the going down of the Iron Curtain that so far as we knew there was no appreciable production of tungsten in Russia itself.

Now, after China went Communist, supplies of tungsten from China became available to Russia, but Russia claims now—this is a book which I got hold of the other day by Pyotr Antropov, Minister of Geological Survey: Mineral Wealth of the U. S. S. R. Foreign Languages Publishing House, Moscow, 1956.

Now, in this book Russia makes the specific claim that she is now first in the world reserves of tungsten.

The CHAIRMAN. In tungsten?

Mr. LONG. Yes. Ahead of China or anybody else. I am reading now from this booklet on page 6:

> Planned exploration and exploitation of mineral wealth have resulted in the Soviet Union outstripping many countries as regards explored sources of minerals. The Soviet Union now holds a leading position in the world reserves of such important minerals as iron, petroleum, manganese, coal, copper, lead tungsten, chromite, and potassium salts.
>
> This is proof of the vastness of its mineral wealth.

That is their claim. Now over here they make this further statement:

> Tungsten and molybdenum. The raw material foundation of the tungsten industry has been built up completely in Soviet times. Large-scale prospecting carried out in the U. S. S. R. beginning with 1930 quickly brought to light numerous tungsten deposits in a number of districts and advanced the Soviet Union to first place in the world in known reserves of the metal.

The deposits are concentrated in Kazakhstan, the north Caucasus, Central Asia, Buryat—Mongolia, the Transbaikal region and other areas.

Now we did not know that that was the case. I have asked any number of the Government agencies. None of them could give me that information. Now Russia makes that claim. We may believe that they are bragging, but we do know that most of the things that they claimed there are true. We know that they have got the world's greatest sources of manganese. We know that they have a lot of iron.

We know that we have a lot of chromite. We know that they have substantial production of several materials. So I do not think that we can afford to take too lightly their statement that they have developed the world's leading reserves of tungsten. I know that we should not take too lightly their statement that they are increasing their concentrate production capacity in Russia by 57 percent in the new 5-year plan which they are inaugurating this year.

There is another thing in this connection that I want to call to your attention. That is this: This little booklet put out by the State Department, Together We Are Strong. Now I subscribe entirely to that statement. I subscribe entirely to assisting our allies in every way that is proper.

I have always been of that opinion and always will be. But in arriving at that we ought not mislead our people and we ought not weaken our own economy in doing it. In this little booklet they list Minerals Vital to United States Industry, and Source of 1955 Supply. Now in your first column they have tungsten. You start up here with graphite. We imported all. We imported quartz crystal, all; tantalum, all.

In platinum we produce a little. In tungsten we imported—according to this, we imported about 55 percent of our tungsten. Now the United States did import about 55 percent of all the tungsten which appeared in the United States in 1955 but the imports were not vital to industry.

Much of the imports were for the United States stockpile and went into our stockpile. The United States produced that year, according to the Bureau of Mines, 15,833,000 pounds of tungsten. Our consumption was 8,907,000. We produced about 50 percent more domestically in the same year than we consumed. Our productive capacity was amply sufficient for this country's normal needs.

But if you look at this booklet you would think that you had to pass the Reciprocal Trade Act extension in order to keep on getting this essential tungsten to industry. That is the fallacy of the argument, and that is the burden of my song at this moment.

Mr. REDWINE. May I ask a question or two to develop that point?

The CHAIRMAN. Mr. Redwine.

Mr. REDWINE. Mr. Long, what your chart really demonstrates is that we were buying for the stockpile 45 percent, is that not true?

Mr. LONG. We imported more than we produced.

Mr. REDWINE. Just a minute. We were buying for the stockpile from foreign sources 45 percent.

Mr. LONG. Fifty-five percent, some of which went to the stockpile.

Mr. REDWINE. Fifty-five percent, that is correct. We were producing almost twice as much actually as we were consuming in this country, we were buying for the stockpile from our domestic producers but we were also buying from foreign sources importing 55 per-

cent of all that came into the United States, domestically or from foreign sources, Mr. Chairman. And at what price were we paying foreign producers for that, on an average, Mr. Long?

Mr. LONG. About $55 per unit.

Mr. REDWINE. What were we paying the domestic producers?

Mr. LONG. We were paying the domestic producers at that time the same time $55 bue we limited it to 5,000 units per month from any one producer.

Mr. REDWINE. To be fair we will have to say that these foreign contracts were entered into several years ago when the need was dire.

Mr. LONG. Yes. I have no quarrel at all. I have approved of the entry of this country into foreign contracts for tungsten. We should today buy every pound of tungsten that we can buy anywhere in the world and bring it over here and put it in our stockpile.

It is shocking to me that a man would listen to the argument that a stockpile of 6 years or 7 years supply is too much and that we ought not to buy any more.

Mr. Chairman, we ought to be happy if we had enough for 10 or 20 years of war and we ought to pray to God that we would have enough for a hundred years. That is what we need. I cannot understand the philosophy or the motivation of the people that think that we ought not to accumulate in this country all of these indestructible materials that we can at prices that are fair.

In that connection I would like to make this statement, Mr. Chairman. I think it is nothing short of immoral for us to be buying tungsten from South Korea as we are today at $8 a unit. We ought not to try to beat the man that is supposed to be our friend abroad down to the lowest possible dollar.

We ought to pay gladly a fair price so that the producer can make a profit and the scale of living of those people be lifted to a higher level so that someday in the future maybe we can trade with them on a fair and equal basis. We cannot expect to trade with people who pay their employees no wages. There is no possible parity in there.

They have to trade with each other, the low scale countries, where the economies are on a parity. We cannot bring our economy down to the level of theirs. Now in that connection I want to make this statement to you for the record. We have given to South Korea, and I have no quarrel with it, $1,118 million. Now within the past 2 weeks we gave them a little over $50 million of agricultural products, with nothing concrete in exchange.

I would make this suggestion: that it would seem to me to be reasonable that we could, at least in exchange for that at a pair price, require them to deliver to us their tungsten and take that tungsten and put it away here securely in our stockpile as an insurance for the future and not let it stay in the world market, beating the prices down to where the entire industry here has to go down and then a few years from now, the first time a shot would ring around the world, the next minute every tungsten mine in this country would be forced open.

As I sit here testifying before you, I am confident within 2 or 3 years the Government will be back in North Carolina asking us to increase our capacity down there and make available more of this high-temperature metal. And today, if they had followed your advice and recommendation and your vote, we would—as I said in the open-

ing remarks, we would be in normal production instead of living on our hopes. That is all we have been doing now. We have been delaying the unhappy hour of closure in the hope that conditions would change. But I am confident that the utilization of the unique characteristics of tungsten to meet the high-temperature requirements that are right in front of us is going to require us to take action again to increase tungsten production in this country.

In the meantime it seems to me nothing short of unwisdom for this Nation to fail to be buying at reasonable prices all tungsten it can get anywhere on earth and bring it over here and put it away where it is out of reach of contamination. It would be easy enough to put it in the ground. It is not going to rust; nobody can steal it; it is not going to burn up.

You cannot build a fire hot enough to affect it. It is a situation that requires the thoughtful attention of everyone in this country. Now in that same State Department booklet there is a table "Imports are essential to auto manufacturing." This colorful little booklet was put out to help pass the Federal Trade Agreements Act and mutual aid; it is full of sex appeal, in contrast to the official reports published by the Bureau of Mines. The State Department booklet says that imports are essential to auto manufacture and then lists them. Among them is tungsten. Now tungsten is essential to auto manufacture.

It takes a little tungsten to build any automobile that is built today. You have to have it in your tools if you are going to build an automobile at a low cost. You have to have it in your firing mechanisms, distributors, and so on. But you do not have to import it.

We can and do mine it domestically. They say you have to go for that trade act because you have to import tungsten or you won't run your automobile industry, and if you don't run your automobile industry the people will be in the breadlines and you will have a depression.

Now we ought to get away, Mr. Chairman, from that muddy sort of thinking in this country. We ought to realize that we ought to keep industry going in this country, not only in the high-temperature metals for which the Advisory Committee to the ODM recommends that we treat with special treatment and that we keep an active mobilization base going in this country, but we ought to do it in all the metals.

I cannot imagine why the Congress of the United States would not adopt as a policy of this Nation—and one which the executive department would have to carry out—that, wherever it is possible for us to do so, it is the law of this land that at least one-third, and two-thirds if possible, of any of our metals must be produced from sources at home.

Now if we do not have any here we will buy it abroad. If we have not any tin or coffee we will buy it abroad, but if we have the sources here as we have in tungsten, as we have in numerous others, it seems to me that the Congress should take the matter in its own hands and say that this is the law. Now as to the means to do it, I would hate to have to sit down here, today, tomorrow, or this month and write you out a bill that would fairly and properly meet all contingencies in all the metals and all the materials that ought to be taken care of.

But you could certainly write the fundamental philosophy and then require that philosophy to be carried out by the administrative agencies that would do it in each instance and in an orderly and proper manner.

Mr. BIBLE. How much of a domestic market do you think tungsten should have?

Mr. LONG. I think domestic tungsten should have the entire domestic market because we have demonstrated our capacity to more than produce our needs in 1955, as indicated earlier in my statement. But I should say this, that we could start out with two-thirds. That would be my recommendation as a moderate beginning, to keep the price from going too high. Let the pressure come in from abroad to that extent.

But certainly in this high temperature material it is nothing short of folly if we permit the domestic producers to go by the board and not have an active mobilization base here capable of rapid expansion in the event of need.

Mr. BIBLE. I understand your answer to be that as of today you think the tungsten industry should have two-thirds of the domestic market.

Mr. LONG. As a minimum, yes.

Mr. BIBLE. As a minimum?

Mr. LONG. That ought to be in every metal in the country.

Mr. BIBLE. I am sorry I missed your earlier statement you made covering the point. The thing that keeps troubling me is what can the Interior Committee do to be of assistance to the tungsten industry? Is this the correct form or is it the Ways and Means Committee or is it the Finance Committee?

Mr. LONG. It takes all of you.

Mr. BIBLE. But what specifically can this committee do?

Mr. LONG. You can devise a method and make a recommendation and introduce legislation and commend it to the other committees that have to pass on it.

Mr. BIBLE. What type of legislation is that in the case of tungsten? What form does that take in the case of tungsten? Is that an import quota limitation?

Mr. LONG. I would leave that to the administrative agency. Let them decide whether they want to do it by quota or tariff or some other device.

Mr. BIBLE. It is before the Tariff Commission now. Do you want more legislation on it?

Mr. LONG. Yes, I do. I think the Tariff Commission should be abolished unless it is made an arm of the Congress I don't think it has accomplished anything within the last 10 years.

Mr. BIBLE. You think it should be left to administrative agency? What administrative agency would you leave it to?

Mr. LONG. I would put in a mobilization base agency under the Interior Department and require them to operate industries where possible on at least a two-thirds basis in this country. On a few metals such as tin you would not have it, of course.

Mr. BIBLE. I am talking about tungsten. Would you generally transfer the functions of the Tariff Commission then to a new agency within Interior?

Is that what you are saying?

Mr. LONG. I do not think the Tariff Commission has any part in this discussion that we are having at this moment. The tariff would be employed if that agency decided it wanted to use the tariff as a

mechanism to preserve at least two-thirds of the productive capacity in this country.

Mr. BIBLE. Then what would the Interior Department agency do specifically under your theory? They are not setting a tariff as I understand it?

Mr. LONG. They would have authority to set a tariff.

The CHAIRMAN. Could not the Congress legislate a policy?

Mr. LONG. That is right.

Mr. BIBLE. And establish a policy on all these metals and minerals which are essential to national defense and that we can produce at home?

Mr. LONG. That is right.

Mr. BIBLE. And not close down these mines?

Mr. LONG. That is exactly what I recommend. You fix the broad national policy and then let the administrative agency carry it out.

The CHAIRMAN. Yes. We could establish that as the policy of the United States.

Mr. LONG. Now I have written out what ought to be done in the case of tungsten. With my associates I prepared the other day and submitted this to people in the Government as what the tungsten industry thinks ought to be done. This is it.

I would like to read this into the record if you will permit me, Mr. Chairman.

The CHAIRMAN. You have not already done this?

Mr. LONG. No.

The national security position in the case of tungsten cannot be judged only in the light of present consumption, present production, and existing stockpiles. Tungsten is the metal possessing the highest melting point of all metals—6,143° F.

Indeed, of all the elements, only carbon possesses a higher melting point, and it lacks the strength characteristics of a metal. There can be no denial that present Government stocks accumulated as a result of crash programs during the Korean war are large in the light of present consumption patterns.

However, the mere existence of large Government stocks is no justification for completely killing off a domestic mining industry, indeed, quite the contrary was the expressed intention of the framers of the Stockpile Act, who set forth the policy that stockpile activities should be used to encourage domestic industry. More importantly, however, advancing research and development over the next several years will make any present usage patterns obsolete since greatly increased usage of the high temperature materials is expected.

Mr. BIBLE. May I interrupt you there?

I would like to have you indicate whether or not there have been any increased usages of tungsten as a result of the studies that have been made or are to be made by the Stanford Institute?

Mr. LONG. I went into that at length earlier.

Mr. BIBLE. Have you testified any new consumptive use?

Mr. LONG. Yes.

Mr. BIBLE. How much in the way of units per year?

Mr. LONG. Not a very great deal. Presently there is one in our opinion.

Mr. BIBLE. How much?

Mr. LONG. Thirty million pounds per year—twice what we have ever produced. In the highest peak in 1955 we produced 15 million pounds. In the next 2 or 3 years our uses could require 30 million pounds.

But that is my judgment based on what we are doing at Stanford Research Institute, based on research in engineering needs.

Mr. BIBLE. When do you anticipate that we will reach that plateau of higher consumptive use of 30 million pounds per year domestically?

Mr. LONG. I have said we will do it in 2 or 3 years. Some of my associates say it will take 5 years.

Mr. BIBLE. I note that the Department of Commerce in making an estimated consumption figure for tungsten for 1959, in a table which was introduced before this committee this morning, estimated that the 1959 consumptive use of tungsten would be in the neighborhood of 8,500,000 pounds.

Mr. LONG. That is not anything but a straight curve based on projecting past usage patterns. That is giving no effect whatsoever to what is talked about in this report to ODM. That is giving no thought to new developments.

That is just the old pattern of tugnsten use projected in the future based on a 3-percent increase in population. That is a standard thing that they hand out from the bureaucrats every time you go and talk to them.

Mr. BIBLE. In your opinion what would be the estimated consumptive use of tungsten concentrates in 1959?

Mr. LONG. Next year?

Mr. BIBLE. They say 8,500,000. I would like to have an indication of what you think the figure might be.

Mr. LONG. I would say it might be as high as 10 million. It is going to depend on general business. You see, your consumption figures are down now. If you knew how they get consumption figures, this is the way they get consumption figures. An example of true consumption is when that light burns out.

That is when tungsten is consumed. Nobody can check that. Consumption figures that are furnished by the Bureau of Mines are furnished on this basis. Purchases by consuming industries—and if they are using up inventory it is reflected that you are not consuming when industry is actually consuming.

They do not truly reflect true consumption; they never have and they never can. You consume tungsten when you use up a drill bit or a tool, when you burn out a light, when the thing is through. But the way consumption is figured statistically is when General Electric or Sylvania or United States Steel buys tungsten, then that is entered into consumption. When they are using up inventory and don't buy tungsten they say consumption is down, although tungsten is still being consumed.

It is a distorted figure that we look at. Over a period of years, though, it should average out.

Mr. BIBLE. Pardon my interruption.

Mr. LONG. I would like to finish this statement.

The CHAIRMAN. You may proceed.

Mr. LONG. Further, the Government must be prepared for economic and political warfare, limited peripheral warfare, and all-out nuclear warfare. A going domestic tungsten mining industry dedicated to

the expansion of existing deposits and the continual search for new ones, as well as energetically pushing research on the development of new and important uses, provides the proper assurance for future national security that a sterile stockpile can only supplement, never supplant.

The domestic tungsten mining industry now faces extinction unless prompt action is taken by the executive branch.

This program is for executive action and does not require any congressional action at all. There is ample existing law and ample existing appropriations for the executive branch of our Government today to take care of tungsten perfectly within the law.

Mr. BIBLE. You are referring to ODM, is that correct?

Mr. LONG. I will read it to you and you will see.

Public Law 733 of the 84th Congress approved by the President July 19, 1956, established a program under the jurisdiction of the Department of the Interior for the maintenance of the domestic tungsten mining industry.

Although supported by the administration, this program aborted less than a half year from its start when the Congress failed—not through any failure of this committee or the Senate but the failure of the House—to appropriate the necessary moneys to carry out the law. For awhile the domestic tungsten mining industry was encouraged to believe that the administration would rectify this situation, but no positive results were forthcoming.

The Congress then, in August of 1957, directed the United States Tariff Commission to make a study of the tungsten tariff situation under section 336 of the Tariff Act of 1930. Again the domestic tungsten mining industry was encouraged to believe that some form of positive assistance would be forthcoming.

However, on February 28, 1958, the section 336 investigation aborted, with a majority of the Tariff Commission apparently believing that there did not exist a proper basis for a positive finding primarily because Government programs had largely obscured price relationships in tungsten ever since the start of the Korean war.

It should be noted that no attempt was made to contact domestic tungsten producers in this so-called investigation. No one of us ever heard a word from the Tariff Commission. They just said you could not find any proper price relationship.

Having experienced both of these abortive efforts, the domestic tungsten mining industry faces extinction unless the Department of the Interior moves promptly to develop a proper program to maintain this essential component of the mobilization base.

A PROPER PROGRAM FOR TUNGSTEN

Dry up much of the burdensome foreign surpluses currently overhanging the market and depressing prices on a worldwide basis by acquiring foreign tungsten, particularly of Korean and Bolivian origin for the supplemental stockpile.

As of September 30, 1957, the United States Government has already obligated $1,118 million for aid to Korea and $71 million for aid to Bolivia. From these two countries we can properly require the delivery of a strategic material such as tungsten in part repay-

ment of such aid. Barter with other foreign sources should also be undertaken.

It does not take any additional congressional action for the administration to do that if they would. Just last week they gave outright to Korea a total of $50 million of agricultural products. Nothing concrete was required in return. At present 25,000 units a month from Korea and 25,000 units a month from Bolivia on the world market is what has wrecked the world price structure in tungsten.

Mr. BIBLE. Do you feel that in exchange for $50 million in surplus commodities that was given to Korea, we should have taken back $50 million worth of tungsten, is that the point you are making, and frozen it into a supplemental stockpile.

Mr. LONG. Yes, sir.

Mr. BIBLE. What effect would that have?

Mr. LONG. It would just increase the stockpiles in this country and increase our national security and it would take the tungsten pressure off the world market.

Mr. BIBLE. Would it do that or would it stimulate production in the foreign fields even more.

Mr. LONG. This would not stimulate production in the foreign field any more in my opinion.

Mr. BIBLE. Why?

Mr. LONG. Because I do not think you can increase it very much in the foreign fields today. We give Korea $50 million, yet they are selling their tungsten today at $8 a unit.

Mr. BIBLE. Is it that low now in the world market?

Mr. LONG. Yes.

Mr. BIBLE. It carries a duty of $7.90.

Mr. LONG. That is correct. They are producing less than that now. That is what they were producing. That is 300,000 units a year. At $8 a unit you are not talking of $50 million, you are talking $2.5 million. It is just a little handful of money we are talking about in tungsten.

Two, relieve the domestic miners of the material produced in good faith under Public Law 733 that has not yet been purchased by the Government.

This could be done through the use of existing stockpile funds, Defense Production Act funds, or even barter arrangements. There are about 250,000 units left in the hands of the producers in this country that we produced in reliance on Public Law 733.

Mr. BIBLE. I think you should be paid for them, as you well know.

Mr. LONG. If that was bought and taken off the market——

Mr. BIBLE. How do you suggest we can pay for them? We have tried the appropriation route. As you well know, we failed in securing the appropriation to buy the 250,000.

Mr. LONG. You do it through the Defense Production Act. All ODM has to do is find the fact that the maintenance of a going tungsten mining industry in this country is necessary as an element of national security and then it has all the money it needs to buy the tungsten itself to carry out that policy.

It does not take any action by Congress or anybody else. ODM could make that finding.

Third, institute a quota or higher tariff on tungsten ores, concentrates, and products under section 7 (b) that will enable the domestic tungsten miner to supply a major portion of normal United States industrial demand.

The President of the United States has complete authority today upon a finding that the preservation of a going tungsten mining industry in this country is essential to the national security, to increase by Executive order the tariff to whatever extent he must.

Mr. BIBLE. Will you put me clear as to what ODM has done on this very point? I was under the impression that ODM had specifically stated that defense requirements had been met, that there was a sufficient mobilization base for a wartime emergency.

Mr. LONG. Exactly. What I am asking ODM to do——

Mr. BIBLE. What you are asking them to do is reverse their finding.

Mr. LONG. That Dr. Flemming made earlier prior to the 1958 recommendation made by their own Advisory Committee that special provision should now be made for the high-temperature materials. If the administration chooses to do so it has this authority to do these things.

Mr. BIBLE. I think I agree with you that they have the authority. The point I am trying to develop is that it seems to me they have ruled adversely to the contention you are making. Is that correct?

Mr. LONG. Last year Dr. Flemming, then Director of ODM, appeared here and said that—

> We cannot buy any more tungsten with defense money because the military has told me that we have all the tungsten on hand that we need. I, therefore, ask you to take action because I think that this industry should be preserved.

In response to that the committee voted in favor of that and Congress enacted Public Law 733. I say that since then we have had these sputniks flying around the world. We have had many of our missiles fail.

I say they are failing because of the lack of high-temperature materials in them to withstand the heat. I say that as a matter of opinion as an observer with no technical knowledge whatsoever, no access to any secrets. That is my opinion. I know this, that the ODM Special Advisory Committee recommends that special treatment be given to the high temperature materials.

Mr. BIBLE. On what page do they do that in that Advisory Committee report?

Mr. LONG. Pages 8 and 9 of its report. I have read that into the record.

The CHAIRMAN. It is already in the record.

Mr. BIBLE. I can read the record if it is already in that.

The CHAIRMAN. I was going to say we have other witnesses to finish this afternoon. I wish you would try to complete your statement as soon as you can.

Mr. BIBLE. In fairness to the witnesses I think I am responsible for delaying, Mr. Chairman.

Mr. LONG (continuing). 4. Sponsor a properly coordinated high-temperature material research and development program which gives adequate emphasis to tungsten, among other materials. At present there are fragmentary and sporadic projects sponsored by the Army, Navy, Air Force, Atomic Energy Commission, Department of the

Interior, Department of Commerce, and the National Science Foundation.

But there is no coordinated high-temperature metallurgical research and developmental program of the magnitude required to provide the high-temperature materials that will be needed for defense and atomic energy programs.

This is particularly true with respect to studies on alloy formation and workability.

AUTHORITY FOR MAINTENANCE OF THE DOMESTIC MOBILIZATION BASE

1. Section 1 of the Strategic and Critical Materials Stockpiling Act of 1946 stated that it was the policy not only to acquire and retain stockpiles of strategic and critical materials, but also to encourage the conservation and development of sources of these materials within the United States.

2. Section 2 of the Defense Production Act of 1950, as amended, states that it is the policy to expand productive capacities and supply beyond the levels needed to meet civilian demand in order to reduce the time required for full mobilization.

3. Section 7 (b) of the Trade Agreements Extension Act of 1955 provides that, when the President finds that an article is being imported into the United States in such quantities as to threaten to impair the national security, he shall take such action as he deems necessary to adjust the imports of such article to a level that will not threaten to impair the national security.

4. The final report of the President's Cabinet Committee on Minerals Policy, dated November 30, 1954, points out the need for maintaining an adequate domestic production component of the mobilization base. The report states that a program involving the best use of all the existing authorities of the Government should be developed to maintain the mobilization base and that if existing authorities are inadequate, appropriate legislative recommendations should be prepared.

Pursuant to Defense Mobilization Order I–13, the Secretary of the Interior is responsible for analyzing the problems involved in maintaining an adequate mobilization base for partial or full mobilization conditions and for recommending necessary programs in the case of metals and minerals.

5. The report of the Special Stockpile Advisory Committee to the Director of ODM, dated January 28, 1958, points out that demand for high temperature and other special property could increase sharply and that a mechanism must be established to appraise the possible effects of research and development activities on requirements for high temperature and other special property materials. Instead of relying on past use patterns, possible needs 5 to 10 years hence should be surveyed.

The committee also pointed out the desirability of maintaining the mobilization base, citing that a plan should be developed to make appropriate use of each of the existing authorities of Government including possible tariff adjustments, imposition of quotas, tax concessions, and installation of Government-owned equipment.

The report also pointed out that as existing statutory authorities are inadequate, additional legislation should be requested.

6. The Agricultural Trade Development and Expansion Act of 1954, as amended, provides for the creation of a supplemental stockpile to be additional to the amounts acquired under authority of the Strategic Stockpiling Act. Materials are to be acquired for the supplemental stockpile by purchase with foreign currencies derived from the sale abroad of United States agricultural surpluses or by barter activities.

The CHAIRMAN. I think you have covered the subject very well. Your statement is very important. I am sure the committee will read it with great interest and be greatly influenced by your suggestions and advice.

Mr. LONG. I thank you for the opportunity to appear.

Mr. BIBLE. May I ask just one question. I apologize again for being late. I know of Mr. Long's intense and vigorous interest in this field. I am very well aware of the position that he holds. I am under the impression that ODM has said that they want to hold to a certain level of productivity in order to create an adequate mobilization base.

Would you know whether or not ODM has ever indicated to the tungsten industry what that level of productivity is?

Mr. LONG. No; and I do not know at all that ODM has adopted the view I think should be adopted.

Mr. BIBLE. That is one of the points they make. I wonder if they have ever indicated to you, and you have always been active in the tungsten institute, whether or not they have ever indicated to you or to the other members of the institute as to what that level of productivity is?

Mr. LONG. No, they never have. But this report to the ODM by the Advisory Committee has not been adopted by ODM, it has not been adopted by Mr. Gray as his own. I am hoping it will be adopted.

Mr. BIBLE. Mr. Gray is a North Carolinian; is he not?

Mr. LONG. Yes, sir; he is one of our most distinguished citizens.

The CHAIRMAN. Thank you very much. I think you have presented a very valuable statement.

Mr. LONG. Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Clott.

STATEMENT OF HERMAN CLOTT, WASHINGTON REPRESENTATIVE, INTERNATIONAL UNION OF MINE, MILL, AND SMELTER WORKERS

Mr. CLOTT. My name is Herman Clott. My address is room 600, 711 14th Street NW., Washington, D. C. I am Washington representative for International Union of Mine, Mill, and Smelter Workers on whose behalf I submit the following statement:

The International Union of Mine, Mill, and Smelter Workers represents the great majority of the workers employed in mining, smelting, and refining of nonferrous metals. Most of our membership is employed in copper, lead, and zinc in both the United States and Canada.

I appear before you today to present my union's proposals for short term and longer run measures to overcome the present metals crisis and to lay the basis for a sound and prosperous domestic mining industry.

We need not dwell at length before this knowledgeable group on the nature and cause of the nonferrous metals industry crisis. The problems of the industry have been analyzed and detailed by representatives of this union, and by industry spokesmen within the past 9 months before the latter committee, last August and only last week.

Members of this committee have shown the greatest sympathy and understanding of the problems outlined in testimony presented by our union at these appearances, and I wish only to summarize here, very briefly, how the situation stands today.

Nine months ago, we presented estimates to the Senate Finance Committee showing that 3,500 to 4,000 workers in lead and zinc, and between 2,000 and 2,500 workers in copper had lost their jobs as a result of mine production cutbacks or shutdowns since the onset of the present crisis in early 1957.

By the end of this month, making allowance for over 1,000 workers who were scheduled to be laid off by the Kennecott Copper Corp. on March 22, and for 400 workers scheduled to be laid off at the Miami copper mine in Arizona, a total of over 16,000 jobs will have been lost; some 8,500 in lead and zinc, and 7,500 in copper.

These totals are based on reports obtained from our local unions, from press and company announcements, and from other available sources. Attached to my prepared statement is a State-by-State tabulation showing the number of jobs lost in lead, zinc, and copper. I will not read the table here, but offer it as an exhibit for the record of this committee.

The CHAIRMAN. It will be carried in the record at this point.

Mr. CLOTT. Thank you, sir.

(The table referred to is as follows:)

Partial list of work curtailments in lead-zinc and copper mines and smelters, January 1957 to Mar. 22, 1958

1. LEAD-ZINC MINES—SHUTDOWNS AND LAYOFFS

State	Company	Location	Date of shutdown or cutback	Number of jobs lost
Arizona	American Smelting & Refining.[1]	Patagonia		(2)
	Coronado [3 4]	Dragoon	July 15, 1957	135
	San Xavier [1]	Twin Buttes	June 1957	35
California	Anaconda [1]	Darwin-Shoshone	About June 1957	219
Colorado	American Smelting & Refining.[1]	Crested Butte	July 1957	80
	Callahan Lead & Zinc [1]	White Pine	Recent	(2)
	Combined Metals [1]	Crested Butte	July 1957	30
	Resurrection [1]	Leadville	do	150
	Small Leases [1]	do	do	50
	Shenandoah-Dives [1]	Silverton	Recent	(2)
	Smaller Mines [3]	Different parts of State.	January–October 1957	294
Idaho	American Smelting & Refining.[3]	Coeur d'Alene (Frisco).	December 1956	100
	Nabob [3]	Coeur d'Alene	June 1957	20
	Triumph [3]	Hailey	July 12, 1957	125
	Small leases [3]	Coeur d'Alene	August 1957	23
	Day mine [3]	Kellogg	August, October, December 1957.	67
	Bunker Hill & Sullivan [1]	do	Feb. 2, 1958, 4-day workweek.	(2)
	Hecla Mining Co.[1]	do	Feb. 2, 1958, 4-day workweek.	(2)
	Sidney Mining Co.[3]	do	Feb. 14, 1958, partial shutdown.	26
Illinois	Eagle-Picher [4]	Galena	January–October 1957	47
Missouri	St. Joseph Lead [1]	Doe Run	January 1958	12
	do.[1]	Bonne Terre	Production cutback scheduled for March 1958.	(2)
Missouri-Oklahoma-Kansas (tristate district).	43 companies [5]	Throughout tristate district.	January–October 1957	1,829
	National Lead [1]	Ballard Mine, Baxter Springs, Kans.	January 1958	100
Montana	Anaconda [3]	Butte	January to October 1957:	
			Lexington	572
			Orphan Girl	40
			Trevonia [6]	110
			Badger	235
			Original	26
			Anselmo	26
			Emma	58
			Shops, etc	65
Subtotal [7]				1,132
Nevada	Combined Metals [1]	Pioche	August 1957	150
New Jersey	New Jersey Zinc [1]	Sterling Mine	do	(2)
New Mexico	American Smelting & Refining.[3]	Bayard and Deming.	July 15, 1957	225
	New Jersey Zinc [3 8]	Bayard	July 1957	18
	Peru Mining [3]	do	May 1957	102
	Banner Mining [3]	Lordsburg	October 1957	115
New York	St. Joseph Lead [1]	Balmat and	February 1958, cut to 4-day workweek.	(2)
Tennessee	Tennessee Coal & Iron [1]	Jefferson	July 1957	(2)
Utah	Chief Consolidated [1]	Eureka	June 15, 1957	70
	New Park Mining Co.[1]	Park City	September 1957	200
Washington	American Smelting & Refining.[1]	Coleville	July 1957	80
	Pend Oreille Mines & Metal.[1]	Metaline Falls	February 1958, cut to 4-day workweek.	
Wisconsin	Several small mines [5]	Southern Wisconsin.	January–October 1957	84
Total, mines				5,518

See footnotes at end of table.

Partial list of work curtailments in lead-zinc and copper mines and smelters, January 1957 to Mar. 22, 1958—Continued

2. LEAD AND ZINC SMELTERS—PRODUCTION CUTBACKS

State	Company	Location	Nature of curtailment	Date
Arkansas	Athletic Mining & Smelting.[1]	Fort Smith	40-percent reduction, 75 men laid off.	June–October 1957.
Colorado	American Smelting & Refining.[3]	Leadville	Work curtailment, 26 men laid off.	July 1957.
Idaho	Bunker Hill & Sullivan.[3]	Kellogg	270 men laid off	December 1957.
Illinois	American Zinc [1]	Hillsboro	70 men laid off	January 1958.
	do [1]	Monsanto	3-week shutdown	January 1958.
	New Jersey Zinc [3]	Depue	(16)	
	Matthiessen & Hegler.[1]	La Salle	1,000 tons per month zinc curtailment.	Fall, 1957.
Missouri-Oklahoma-Kansas (tristate district).	Eagle-Picher Co.[1 11]	Henryetta, Okla.	Shutdown, 650 men laid off.	February 15, 1958.
Montana	Anaconda [3]	Great Falls	127 men laid off	Since January 1957.
	do [3]	Anaconda	172 men laid off	Since January 1957.
Oklahoma	American Metal Climax.[1]	Blackwell	Furnace blocks reduced from 13 to 10.	February 1958.
	National Zinc Co.[3]	Bartlesville	1 furnace block down, 42 men laid off.	February 1958.
Pennsylvania	American Steel & Wire.[1]	Donora	Shutdown, 450 men laid off.	November 1958.
	St. Joseph Lead [3]	Josephtown	31 percent zinc smelter production cutback.	December 1957 to March 1958.
	New Jersey Zinc [3]	Palmerton	(16)	
Texas	American Zinc [1]	Dumas	10 percent reduction	July 1, 1957.
	American Smelting & Refining.[1]	Corpus Christi	30 percent reduction	July 1, 1957.
Utah	International Smelting & Refining.[3]	Tooele	210 men laid off	January 1957–February 1958.
West Virginia	Matthiessen & Hegler.[1]	Meadowbrook	Production cutback	February 15, 1958.
			Total, smelters, 2,092	

3. COPPER MINES AND SMELTERS—SHUTDOWNS AND CUTBACKS

State	Company	Location	Date of shutdown or cutback	Number of jobs lost
Arizona	Bagdad Copper Co.	Bagdad	Reduced workweek, June 1957.	(3)
	Inspiration	Miami	Reduced workweek, July 15.	(3)
	Banner Mining	Tucson	2 of 3 mines shut down in June-July 1957.	118
	Coronado	Dragoon	July 15, 1957	135
	Miami Copper	Miami	Reduced workweek, July 15, 1957; scheduled layoff 400 men Apr. 1, 1958, announced March 1958.	400
	Phelps Dodge	Morenci, New Cornelia, and Lavender.	Several cutbacks in production, November 1956 to Februrary 1958, totaling 63,000 tons, annual rate.	(3)
	Several small mines, Santa Ana district.	Douglas	October 1957	(3)
	Kennecott	Ray	Reduced workweek, spring, 1957.	(3)
Michigan	Calumet & Hecla	Calumet division	Layoffs, September 1957.	500
	Copper Range	Upper Peninsula	Layoffs, February 1958.	110
Montana	Anaconda	Butte	January to October 1957.	1,883
	do	Anaconda smelter	July to October 1957	331
	do	Great Falls smelter	January to October 1957.	335

See footnotes at end of table.

Partial list of work curtailments in lead-zinc and copper mines and smelters, January 1957 to Mar. 22, 1958—Continued

3. COPPER MINES AND SMELTERS—SHUTDOWNS AND CUTBACKS—Continued

State	Company	Location	Date of shutdown or cutback	Number of jobs lost
New Mexico	Kennecott	Silver City (Chino division).	January 1957–February 1958.	446
Nevada	do	Ruth-Ely	January 1957–January 1958.	745
	Anaconda	Yerington	16 percent cutback by reducing workweek.	[3]
Washington	American Smelting & Refining Co.	Tacoma smelter	January 1957–February 1958.	337
	Howe Sound	Holden	September 1957	180
Utah	Kennecott	Bingham & Magna	November 1957	300
	do	Arthur, Bingham, Magna.	Scheduled January 1958.	525
Undistributed	do	Western division mines.	Scheduled for Mar. 22, 1958.	1,005
Total, copper mines and smelters.				7,350

[1] Information secured from newspaper story.
[2] Not available.
[3] Information secured from direct report to mine-mill research department.
[4] Copper and zinc.
[5] Testimony at Tariff Commission hearings, November 1957.
[6] Zinc and manganese mine.
[7] Some of men laid off at these mines have been hired at other properties. Net employment loss in Butte, all operations, has been about 2,600 workers. In addition, the largest zinc mine in the district, the Anselmo, with 484 workers, will shut down (we have been informed) if the zinc price drops below 10 cents.
[8] Partial layoff.
[9] 210 men cut back to 4-dy week.
[10] Reduction by New Jersey Zinc at both smelters totals 2,500 tons monthly.
[11] Company shut down all mining, milling, and smelter operations on Apr. 29, 1957. Smelter reopened May 9. Mines reopened June 3, and shortly thereafter half of work force was laid off.

Mr. CLOTT. Uncounted thousands of miners and smeltermen still employed are working short workweeks, which have resulted in cuts in weekly take-home pay of up to 40 percent.

This is the problem as we see it in terms of unemployed workers in our industry. The mining crisis has had an important impact on general unemployment levels in the Western States. Montana, by latest report, enjoys the dubious distinction of leading the country with 15 percent of its insured workers unemployed.

Idaho is 1 of 5 States with insured unemployment above 12 percent. Arkansas, Nevada, Tennessee, and Washington, with more than 10 percent of covered workers unemployed, reflect the decline in mining activity in greater or lesser degree.

Basically, the plight of the American nonferrous metals industries is the result of an immense expansion of world production of nonferrous metals at a time when United States production of lead and zinc has declined, and copper production has only in the past 2 years reached output levels achieved during World War II.

Much of this expansion of foreign production was financed by the United States Government itself, which has extended aid in the amount of almost $400 million in direct loans and grants for foreign lead, zinc, and copper development since 1950. This figure is exclusive of amounts expended for stockpiling, barter of farm products for metals, or purchases under price guaranty agreements with newly developing properties. These latter programs, while operative, also had a marked

effect not only on minerals development, but upon capacity operation of already developed properties.

A measure of the impetus given to foreign production by our Government's direct aid in minerals development, and of its stockpiling, barter, and price guaranty programs, is indicated by the expansion of foreign production of lead in 1956 by 72 percent over average 1946–50 output, of foreign zinc production by 94 percent, and of foreign copper production by nearly 60 percent over the same period.

While foreign production was being greatly expended no similar effort was made to develop new industrial uses and peacetime markets for this greater supply of metals.

Here, Mr. Chairman, we are being constructively critical of the industry itself.

The alleged shortages of metals, during long periods of military buildup, both encouraged the search for substitute materials, which have significantly displaced copper, lead and zinc in many of their previous uses, and further, fostered neglect of the basic research that might have provided new outlets for expanding world production.

When, as was inevitable, growing supplies exceeded a virtually stagnant demand, the full impact of excessive production fell upon United States domestic producers.

The American market, in recent years, has been flooded with imports of lead and zinc. Last year lead imports were 156 percent of United States mine production; zinc imports were 152 percent. In the years from 1946 to 1950, by comparison, imports of lead and zinc were 86 percent and 62 percent, respectively, of the domestic mine production of these metals. The much higher recent figures reflect both increasing imports and declining mine production in this country.

Senator O'MAHONEY. Mr. Clott, I interrupt you because I have some obligation with respect to the Judiciary Committee, that has kept me away from this hearing, with which I am very much concerned. I know I cannot remain until you finish your paper.

There are 1 or 2 basic questions I would like to ask you. You represent the Mine, Mill, and Smelter Workers Union, do you not?

Mr. CLOTT. Yes.

Senator O'MAHONEY. Do you think that there is any evidence that monopolistic practices have restrained, restricted, or held back the development of mineral resources in the United States?

Mr. CLOTT. I do not know if I am fully qualified to answer that, Senator. Offhand I do not think we would say that as a position.

Senator O'MAHONEY. Have you made any study of the utilization of these minerals in the commodities which our Government purchases?

Mr. CLOTT. I do not think we have unless our research department has, Senator.

Senator O'MAHONEY. You are aware, no doubt, that up to 2 or 3 years prior to December 31, 1956, the Government had committed itself to expend in excess of $2 billion for the production of military equipment abroad in foreign countries.

Now, such production in foreign countries would undoubtedly use the minerals of the foreign country. Have you done any research on that score?

Mr. CLOTT. We are not saying that the Government should not have proceeded with the program it did of expansion.

Senator O'MAHONEY. I am not asking you that. I am asking you if you know anything about the source of the minerals that we used in such contracts.

Mr. CLOTT. No; I do not. I would say up until 2 or 3 years ago bulk must have come from this country since these developments did not come into being until the last couple of years.

Senator O'MAHONEY. Are your resources being worked out?

Mr. CLOTT. I do not think so; no.

The CHAIRMAN. I believe the manager of the Anaconda Copper Co. claims there is a great life in the Butte district yet in copper production.

Mr. CLOTT. There is great life in Butte. They have just developed the largest underground mine in Arizona at Magma. There is a very bright future for production. There are other sections of the West that have not been touched yet.

Senator O'MAHONEY. What particular recommendation does the union make for the stimulation of the development of mining in the United States?

Mr. CLOTT. I come to that later on. If I can brief it ahead of time, I will be glad to do it.

Number 1, we think that there should be immediate hypodermic legislation, so to speak. We think the only immediate solution is a quota system which is based somewhat on the relative structure of wages in foreign countries.

The price of lead, zinc, and copper, even though it is not coming in directly, affects the domestic price because of the wage structure.

Senator O'MAHONEY. Let me see if I understand what you are driving at and I think I do because I have been preaching it to the wool men for about 20 years.

My theory with respect to wool was that the importation of woolen fabrics into the United States should be governed by the increase in the living standards of the workers of the country which produces the fabrics.

In other words, that to be entitled to enter our market, any foreign country sending any commodity: minerals, wool, or whatever it might be, into this country should be entitled to increase its quota only by showing that it was raising the standard of living of the people within that country.

Mr. CLOTT. Exactly, Senator. We do not say it in exactly those words but the end result would be the same.

Senator O'MAHONEY. In other words, I have stated the principle correctly?

Mr. CLOTT. Right.

Senator O'MAHONEY. I am very glad to have you say that.

Mr. CLOTT. As a matter of fact, we think that a tariff in itself is not only a blunt instrument but also it has a tendency to choke off imports from those countries which have the higher wage structure and blocks our country and producers from shipping across to those countries who can best buy back what they send us.

For example, Canada would be a No. 1 example.

Senator O'MAHONEY. If the purchasing power of the mass of the people in foreign countries is raised, then they can buy more things from this country and balance the exports and the imports.

Mr. CLOTT. That is right, sir.

Senator O'MAHONEY. But if we do not do that, then the inevitable effect will be to kill the producing industries in the United States by the product of the low-wage-standard countries abroad?

Mr. CLOTT. Yes, sir.

The CHAIRMAN. At the same time we will be lowering the standard of living in the United States——

Mr. CLOTT. And would destroy our domestic industry.

Senator O'MAHONEY. I am sorry, I must answer the bell.

The CHAIRMAN. Proceed, Mr. Clott.

Mr. CLOTT. Where are all those increasing imports coming from? A very substantial portion of these additional imports of lead and zinc are coming mainly from newly developed mines in Peru and countries in Africa. Australia has greatly increased its shipments of lead to this country, an increase of over 100,000 tons last year over the 1946 period.

Yugoslavia also sent us 26,000 tons more lead last year than in the pre-1950 period. Canada and Mexico, traditional sources of supply, have actually been sending us less lead but more zinc.

All of these countries, except Australia, but including Yugoslavia, have been major recipients of United States Government loans, grants, or purchase contracts that enabled them to develop or expand their mines.

The situation in copper is slightly different. There we have not suffered directly from increased imports, although we are bearing the impact of world conditions. Our net imports of copper—that is, total imports less total exports—have actually dropped, and yet the average price of copper in the United States today is less than half of what it was in June 1956.

The explanation of this seeming paradox is that the price of copper is determined by world, rather than just United States, supplies which can be shipped to this country whenever the price difference between United States and foreign markets exceeds shipping costs.

As we have seen, the world production of copper has increased by almost 60 percent from the 1946–50 period to 1956. This increased supply of copper, which is available for shipment to the United States, has beaten down the domestic price just as effectively as if it were physically present in this country.

We have a further problem in copper, world supply is still rapidly expanding. New copper mines now being developed, in Peru, Chile, Africa, and Canada, and to a lesser extent in the United States, will increase world production by more than 650,000 tons per year, or by nearly 18 percent of 1956 output. This will mean a further imbalance and, in the absence of remedial measures, could lend to further sharp reductions in United States mine production of copper.

That's the general picture, too much world production of metals in relation to what the world is using, with United States production and employment now bearing a disproportionate share of the impact.

What can we do about the nonferrous metals problem? This is the most important question facing our union and the industry. It is the most critical economic problem facing the western mining States today. In our appearances before the United States Tariff Commission, and in innumerable conferences with Senators and Congressmen, with other Government officials, and with industry representatives,

we have tried to get some action taken that would provide some form of relief for our hard-pressed members.

At all of these appearances, and in all of these conferences, our immediate objective, especially in lead and zinc, was to secure some immediate means of stemming the tide of imports that threatened to engulf completely United States mines.

We recognized then, as we recognize now, that mere limitation of imports was neither an adequate nor a lasting solution to the deep-rooted problems of this industry. That course of action, then the only possible line of action open to us, was dictated by the sudden employment crisis confronting our membership. It did then, and still does, offer some measure of relief, even though it may not be a lasting cure.

Ultimate solutions to the problems of this industry will have to be found along many fronts. Our primary aim in all this is to preserve the domestic mining industry in which our members work. We're not thinking only of the jobs involved, important as that is, we're also thinking of what the industry means to our total economy, and to the long-range security of this country. Can the United States afford to rely solely, or even mainly, on foreign mines as the source of its mineral requirements? We think not.

Recovery and stabilization of the domestic nonferrous metals industry are inevitably associated with national and international considerations, which we cannot afford to overlook. There are also many immediate and longer range approaches that more directly involve the industry itself.

Let us consider some of the more important of these problems.

1. The national economy: We obviously cannot have a healthy metals industry in an unhealthy economy. The crisis in our industry came before the general crisis, but at the present time, appears as just one aspect of a broader economic problem.

Recovery in this industry must now be based on a general recovery and expansion of the Nation's economy. That broader problem is extensively dealt with in reports and recommendations that have and will be put before the Congress, covering a wide range of measures in such fields as taxation, public works, welfare, and education, all aimed at promoting economic recovery.

I do not intend to elaborate on any of those proposals here, but wish merely to emphasize the large potential impact of a necessary expanded public works and construction program on the demand for nonferrous metals. Such a program, if adequate to our present needs for new housing, schools, hospitals, reclamation projects, rural electrification, and the like, would very appreciably help to stimulate recovery in the economy generally and particularly in our industry.

2. The international situation: World production of metals, we have emphasized, is running well ahead of world consumption. A promising approach to this problem that we think needs more emphasis is that of increasing the use of metals.

One vast and relatively untapped field for expanded use of metals lies in those underdeveloped areas of the world, embracing the great majority of the world's population, which are now seeking to reconstruct their economies along 20th-century lines.

We believe, too, in the objectives of the reciprocal trade program, and believe that, with modifications we will touch upon below, it can lead to wider use of metals and metal products throughout the world.

Our position on this is in basic accord with that expressed by the chairman of this committee when he told our annual convention in Denver a little over 2 weeks ago:

> I have felt that the Reciprocal Trade Agreements Act, properly amended so that domestic industry is adequately protected, can be of considerable advantage not alone to the mining industry but also to our overall industrial economy. I do not feel, however, that the act should be extended unless provision is first made to insure the prosperity of our domestic mining industry, so that our miners can be put back to work on a full-time basis.

Given the means and the opportunity, countries in the Middle East, Asia, Africa and South America would very soon take care of all existing surpluses of metals. The fruitful possibilities of this kind of approach have already been realized by other countries, Canada, just a few weeks ago, agreed to make $10 million worth of nonferrous metals available to India under long-term loans. This is an extremely modest, but still significant, beginning. What prevents our Government from making similar offers to India and other countries?

A vigorous and expanded United States economy, economic development of underdeveloped countries, and more world trade, all these would provide a solid basis for a sound recovery. These are our prescriptions for a lasting cure.

We want to do everything possible to promote these long-range objectives. But our immediate and pressing concern is, and has been, that we still have a domestic mining industry that can share in this recovery.

These bases for a lasting cure cannot be built overnight. In the meantime, United States mines are being shut down and workers are being laid off because of increasing foreign production from low-wage mines.

What are we to do about this situation?

3. The domestic mining industry: Survival of our domestic mining industry, under existing world market conditions requires, in our view:

First, direct price supports to domestic producers, whenever the market price falls below an adequate economic price.

Second, some limitation of imports whenever a flood of such imports threatens serious injury to the domestic industry.

Both of these measures, it should be noted, are basic measures for survival. They would operate only during periods of serious market imbalance. In time, with growing industrialization throughout the world, it is to be hoped that they will be totally unnecessary.

I think the members of this committee, Mr. Chairman, sponsored legislation similar to the two points that we mentioned here. One was the peril-point price on copper and the other one, of course, is a quota plan which was introduced in the last session.

Production bonuses: We favor direct production bonuses to domestic mine producers whenever the open market price of a metal falls below a price sufficient to guarantee that amount of production necessary to preserve a healthy domestic industry. Those payments would not be unlimited. There would necessarily have to be some total limitation on the amount to be paid for each metal, and on the amount to be paid to any one operator.

These general principles are now embodied in a bill introduced by Senator Murray (S. 2395), known as the Minerals Security Act of 1957. We would suggest that the bill be amended so as to extend its benefits to copper, and to set limits on the amount of total production of each metal that would be eligible for a production bonus and on the amount to be paid to any one operator.

This kind of Government support would be a relatively cheap price to pay for the preservation of a vital industry. It could serve as a first line of defense whenever the domestic market suffered from an excess of foreign imports, and would operate immediately to sustain the industry until other measures could take effect in restoring balance.

Limitation of imports: The current problems of our industry stem from the growing competition of mines in other areas, especially from areas like Africa and South America, where wage scales range from one-fifth to as little as one twenty-fifth or less of United States wages. Native miners in South Africa are now getting less than $25 a month; in Peru, daily wages average about $1.58 a day. These wages cannot be justified on grounds of lower productivity. Many of these mines are more modern than United States mines; they are equipped with the most advanced production equipment. How can we possibly compete with that kind of production?

If this production, based on these wage standards, were coming from United States mines, it would be regarded, under our minimum wage law, as "unfair competition" from being shipped across State lines is firmly imbedded in all of our national labor legislation. We would like to see the same principle extended to cover goods shipped in international trade.

When we testified before congressional committees on the administration's lead-zinc bill, and later before the Tariff Commission, we stressed our feeling as to the inadequacy of proposed higher tariffs. We urged, instead, that import quotas be used to limit imports.

The tariff is a blunt instrument with which to limit imports. A tariff, which applies equally to imports from all countries, would act first to choke off imports from countries with adequate wage standards which have been traditional American sources of supply, notably Canada, and would offer little impediment to continued imports from countries with substandard wages. Hence they are not fully effective in limiting imports.

Quotas on imports can be used to deal effectively with problems arising from excessive imports produced by workers paid at substandard wages. We would favor an arrangement which would permit imports from countries with the most adequate wage standards.

When it becomes necessary to curtail imports, the necessary restrictions should be imposed on countries with substandard wage levels, as measured by the relative productivity of their mines.

This approach, in the long run, would actually promote the raising of standards in many of these countries. Our quota proposal was spelled out in detail at the hearings last week before the House Ways and Means Committee, and we would regard it as the proper subject of an amendment to the pending administration bill to extend the reciprocal trade program.

4. More research: Our industry, unfortunately, is one in which research into possible new uses for the product has been practically

negligible. Not one important new use for copper, for example, in contrast to the many new uses for aluminum, has been developed within our memory. Many old uses for copper, lead and zinc, over the years, have been lost to competitive metals.

The needed revitalization of the nonferrous metals industry will require a much greater emphasis on both governmental and industry research programs aimed at—

(1) New techniques for discovery and exploitation of low-grade mineral ore deposits.

(2) Further applications and uses of nonferrous metals.

A far more adequate research effort, especially in areas that may not offer possibilities of immediate cash returns, is one way in which governmental assistance could stimulate greater efforts to find new applications and uses for nonferrous metals.

Very recently, after long years of total neglect of the problem, several industry associations, including the Copper and Brass Research Association, the Lead Industries Association, and the American Zinc Institute, have announced plans for embarking upon this type of research. Their efforts, however belated, are to be commended. We suggest that additional impetus could be given these preliminary efforts through supplemental research by appropriate Government agencies.

5. Aid to distressed areas: All of our proposals above will, even if adopted, require time before their effects can be realized. In the meantime, mines and mills have shut down, men are unemployed, and entire communities have been virtually devastated by the impact of the metals crisis.

We propose, for immediate relief to people and communities, the passage of a distressed-area bill that would provide some means of direct aid to areas injured by excessive imports.

Mr. Chairman, the following proposals are perhaps not of direct concern to this committee in terms of being the Interior Committee but certainly they are a concern of Congress. Certainly the misery and suffering and unemployment can not be looked at without concerning yourselves with these.

Such a bill should include, for workers whose jobs were lost—

(1) An increase in the amount and duration of unemployment compensation benefits.

(2) Early retirement, if desired, for workers over 60.

(3) Federal payment of dismissal wage in cases where employment is permanently terminated.

(4) Retaining of younger and middle-aged workers.

(5) Financial assistance, as necessary, in shifting to new homes or jobs.

The bill should further provide for loans to assist in the launching of new enterprises that would provide new employment opportunities in such areas, and for both loans and grants to public authorities for the construction of public works and other needed facilities.

Conclusion: These then are our proposals for alleviating the metals crisis. We have long-range proposals; we have more immediate proposals.

All of our proposals are motivated by the belief that United States miners and smeltermen, who have contributed so much to the security

and welfare of this country deserve more than the present excess supplies gradually decline.

That same human intelligence and ingenuity which can unlock the secrets of outer space should also be able to find new and expanding uses for the earth's minerals.

Copper, lead, and zinc, metals with a long and useful past, should also have much to contribute to a world at peace in which scientific advances are utilized for the betterment of mankind.

The CHAIRMAN. Are there any questions?

Senator BIBLE. I have no question. I want to thank Mr. Clott for his statement. I think it is a very provocative and very well designed statement. I know the unemployment in the State of Nevada which shows at Kennecott from January 1957 to January 1958 there have been 745 men who have lost their jobs. I have much regret to supplement the record by saying that since that date there has been an additional loss of another 250 men of which you are undoubtedly aware. I think that is effective this month.

Mr. CLOTT. Yes, Senator, that is right. You can hardly keep these up to date. By the time you get them printed there is another layoff.

Senator BIBLE. This condition has occurred since the table was filed.

Mr. CLOTT. That is right.

Senator BIBLE. I think we are aware of the tremendous damage that it does to our domestic economy to have one segment such as copper and lead and zinc down and in some cases completely out of business. I think it is a very fine statement.

The CHAIRMAN. I wish to join the Senator from Nevada in commending the witness. I think he has made a very fine statement.

Mr. CLOTT. Thank you very much.

The CHAIRMAN. That will conclude the hearing today.

We will meet tomorrow morning at 10 o'clock.

(Whereupon, at 4:10 p. m., the committee was recessed, to reconvene at 10 a. m. Wednesday, March 26, 1958.)

LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

WEDNESDAY, MARCH 26, 1958

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS AND FUELS, OF
THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in room 224, Senate Office Building, Hon. James E. Murray (chairman) presiding.

Present: Senators Murray, Malone, and Dworshak.

Also present: Senator Goldwater.

Staff members present: Robert W. Redwine, assistant counsel to the committee, and George B. Holderer, staff engineer.

The CHAIRMAN. The hearing will please come to order.

The first witness this morning is our distinguished colleague from Arizona, Senator Barry Goldwater.

We welcome you here, Senator, and we shall be glad to hear from you.

STATEMENT OF HON. BARRY GOLDWATER, A UNITED STATES SENATOR FROM THE STATE OF ARIZONA

Senator GOLDWATER. I want to take this opportunity as a member of this committee to thank the chairman not only for allowing me to appear here this morning, but also thank the chairman for his farsightedness in arranging this series of hearings.

I think it will have a profound and good effect on the mining industry of the west.

Now, Mr. Chairman, I have a prepared statement, and I will read from it.

The CHAIRMAN. Very well, you may proceed.

Senator GOLDWATER. Mr. Chairman, I would like to direct the attention of the committee from a general appraisal of the domestic mineral industry to one particular problem that we are facing in Arizona, and which is being faced as well in your State of Montana, and other western states. I refer to the critical situation in which the domestic copper industry now finds itself.

On January 16, my colleague, Senator Carl Hayden, introduced a bill which I was happy to cosponsor to amend the Internal Revenue Code of 1954 to provide a 4-cent per pound tariff on the copper contained in copper bearing ores and concentrates; a tax of 3 cents per pound on dutiable articles in which copper—including copper and alloys—is the component of chief value, and a tax of 3 percent ad valorem of 0.75 cent per cound—whichever is the lower—on articles containing 4 percent or more of copper.

No tax would be imposed on copper which is lost in metallurgical processes, or on ores and concentrates, having a copper content of not more than 15 percent, when imported for fluxing purposes, providing the aggregate amount does not exceed 15,000 tons of copper content in any one year.

The United States Tariff Commission, according to this measure, is instructed to determine monthly the average market price of electrolytic copper in standard shapes and sizes delivered Connecticut Valley.

If the average market price is 30 cents per pound or more, the tax would not be applied. Below 30 cents per pound, the tax is to apply to articles entered for consumption, or withdrawn from warehouse for consumption, during the second calendar month following the first such declaration and each subsequent such declaration.

Prices reported by the engineering and mining journals, "Metal and Mineral Markets" are to be used by the Tariff Commission in its determination.

The tax would become applicable on the first day of the third calendar month following enactment of the bill.

The proposed legislation would repeal the present suspension of the import taxes on copper, as provided under Public Law 38, 82d Congress, 1st session, effective on the first day of the third calendar month following enactment of the new measure.

A special section forbids any change in the copper tariffs by application of provisions contained in the Trade Agreement Act or its extension.

Mr. Chairman, I am pleased that you, too, are a cosponsor of this measure as well as many other members of this committee, including Senator Church, Senator Allott, Senator Bible, Senator Anderson, and Senator Watkins. Sixteen identical bills have been introduced in the House of Representatives by various western Congressmen.

Mr. Chairman, I realize full well that S. 2998, which I have mentioned previously, is pending before the Senate Finance Committee, but inasmuch as this bill is a specific measure aimed at correcting a current problem prevalent in the domestic mining field, I would like to discuss it briefly at this time.

This measure is one of the most important things to be considered by this Congress as far as my people in Arizona, and the West, are concerned. The copper mines are cutting back production and workers are being laid off.

This is not due to a general recession, but is due, solely to competition with foreign cheap labor.

We, in the West, are proud of our mines and proud of the miners who work those mines. These men receive high wages and have a high standard of living.

In March of 1957 the average hourly wages paid to Arizona miners amounted to $2.43. Let me contrast those wages with the wages of Bolivia tin miners which are $2.01 to $2.20 per day.

Chile copper miners in 1953 received $3.08 per day.

Colombia miners of the same year received $4.46 per day.

Peru miners in June 1953, received $6.55 per week, and Mexico miners in 1954 received $13.04 per week.

The 1957 hourly wage in Canada was $1.89 per hour.

Northern Rhodesia in 1954 native labor on the surface received $16.76 per month, and native labor under ground received $18.94 per month.

Mr. Chairman, I ask you if it is possible for the western copper industry to compete with such low wage rates.

I might inject here, Mr. Chairman, that the same question could be applied to any mineral mine in the West that is in competition with foreign mined minerals.

It seems to me that the United States Congress could well shift from its perpetual worry about foreign economies and turn its attention to our own domestic economy at this time. I think it is time that the Congress worked about domestic aid rather than its constant attention to foreign aid.

The wage differential which I have mentioned is not the only difficulty in the copper problem. That difficulty is compounded by the fact that productive capacity in copper now exceeds the demand. The responsibility for this imbalance between supply and demand must certainly be accepted by the United States Government because a large percentage of the newly expanded capacity was solicited by the United States Government for security reasons.

In a report of this committee in July of 1954, it was stated that projects developed under the Defense Production Act would add 250,000 tons of copper per annum to American production. It is interesting to note that this expansion in production is just about the same figure as the surplus production for 1956.

Mr. Chairman, I certainly don't quarrel with the Government's action in stimulating copper production, as I know full well that mines are not something that can be opened up in 5 minutes when they are badly needed.

Copper is one of our most vital strategic materials and I would dislike to see our domestic copper industry collapse because of a combination of foreign cheap labor and Government intervention.

If this should happen, our defense potential as well as our domestic economy would be seriously crippled.

The question now arises as to what consideration should be given to the domestic copper producer and what measures, if any, should be taken to protect this industry.

S. 2998, which I have mentioned previously, is to my way of thinking, the best legislative solution to the problem. There are other possibilities and they have all been considered, but, to my mind, and to the minds of many of our western Senators, this is the best approach.

Mr. Chairman, I urge that this commitee make known to the Senate Finance Committee, as well as to the House Ways and Means Committee, its feeling about this vital measure.

Mr. Chairman, it is my pleasure at this time to introduce two witnesses from Arizona who have traveled a great distance to assist the committee in its deliberations.

Mr. Chairman, today there are other Arizonians in the room who will talk before this distinguished committee on the problems of western mining. I should like to introduce them at this time because I have two other committee meetings going on at the present time, that I must attend.

Senator DWORSHAK. Senator, before you do that will you let me explain why I was not cosponsor of that copper bill?

I was advised by Mr. Redwine of the staff, that such a bill was being drafted for introduction and I was requested to cosponsor it. I said that in protest against the procedure we have followed before this committee—I am not critical of the chairman in any way—of dealing with these minerals separately that we were failing to accomplish anything worthwhile and that you probably have heard me time and again before this committee stress the importance of dealing with all minerals on the basis that the domestic mining industry is a very vital part of our national preparedness.

It seems unwise to me to continue as we have for several years to deal with copper or to deal with lead and zinc, or to deal with various minerals separately because it has been demonstrated unless we can close our ranks and recognize a long-range overall program beneficial to the entire industry, we can expect to make little headway.

Therefore, I did not cosponsor the bill.

I want to commend you, though, as a representative of the great copper industry in your State, you have been very persistent in your efforts to relieve the distress, the desperate plight of the copper industry.

Senator GOLDWATER. I might say to my distinguished friend from Idaho that I am perfectly aware of his feelings. In fact, I am in sympathy with his feelings as I have told him time and again.

I have known of his fight to the minerals in his own State that are peculiar to his own State and I might understand why he might feel that the other western Senators were not completely aware of the plight of the metals in his State.

But it is my feeling, and I have discussed this with you, Senator, that if we tried to take the tariff approach on all minerals at the same time that we would probably meet with failure, where, if we took the biggest ore that we have and produced in the West, and we met with success on that, certainly we could expect to move to the other minerals.

I am speaking only of the tariff approach and it is the junior Senator's opinion from Arizona that we representatives have fallen down in our historic duty of protecting industry in this country by proper tariffs.

Senator DWORSHAK. Not only the representatives, but the entire Congress.

Senator GOLDWATER. Let us put the blame where we used to accept and stand up for the blame.

Senator DWARSHAK. We have had free trade for more than 20 years.

Senator GOLDWATER. If we can get rid of that we will do the country a lot of good.

I feel if we can take another approach to minerals which can come from the Department of the Interior, then I certainly stand with the Senator in demanding that all the minerals produced in the West be included in any comprehensive mineral program that this administration might take.

Now, Mr. Chairman, I want to introduce at this time two witnesses from Arizona who come from a great distance to assist the committee in its deliberations.

First I would like to introduce Mr. Arthur B. Parsons. Mr. Parsons is a consulting engineer and outstanding authority on copper produc-

tion and he will appear on the question of the copper tariff. He will be the representative of the Arizona Copper Tariff Board, the Arizona Small Mine Operators Association, and the Arizona copper industry.

Another Arizonian in the room is Mr. Frank P. Knight. Mr. Knight comes from a long line of mining Knights in Arizona. He is the director of the Arizona Department of Mineral Resources and he will testify on problems bearing upon other strategic metals such as lead, zinc, and manganese.

Now, in Arizona, on the vast acreage of the San Carlos Indian Reservation, are two Apache reservations. We have what I consider to be in my layman's knowledge, the largest and best deposit of asbestos in the United States, probably one of the greatest in this continent.

To appear before you today is Jess Stevens, who is chief of the tribal council. Jess has come here from the central part of Arizona.

And Mr. Ed Town of the American Fiber, and Mr. Jagway of Regal Asbestos and Mr. Jack Neal of the Metade Asbestos.

These gentlemen are all here from Arizona to testify on copper, lead, zinc, manganese, and asbestos and probably other minerals.

I want to thank you again for the privilege of being here, and for these men and for the whole State of Arizona, to thank you for your constant interest in this problem.

The CHAIRMAN. I thank you, Senator, for the fine cooperation you have always given this committee. I am very glad to have you here this morning, and we welcome your friends from Arizona. We shall be very glad to hear them.

Mr. REDWINE. Mr. Chairman, I have just consulted with Senator Goldwater. He has graciously agreed to permit Mr. Knoerr, editor in chief of the Engineering and Mining Journal, to testify ahead of the Arizona witnesses. Mr. Knoerr is from New York and was originally scheduled for last Monday.

Senator GOLDWATER. Arizonians are noted for their patience. It took us a long time to become a State. It has taken a long time to have the people recognize the need for a tariff. These men do not mind waiting.

Mr. REDWINE. Mr. Knoerr will add something to the picture, Senator, that will be very helpful.

Senator GOLDWATER. I am sure he will.

The CHAIRMAN. The next witness, then, will be Mr. Alvin Knoerr, editor in chief of the Engineering and Mining Journal.

Senator DWORSHAK. Mr. Chairman, I must apologize for leaving the committee hearing in a few minutes because Secretary Seaton is testifying before the Appropriations Subcommittee on the Interior Budget and I feel it necessary to be there. I regret I cannot remain here.

The CHAIRMAN. We very much regret that you find it necessary to leave the committee at this time. You have been of great assistance to us.

Senator DWORSHAK. I shall try to be back a little later.

The CHAIRMAN. I am sure you will be back as soon as possible.

You may state your name and anything you wish to appear in the record in reference to your testimony here this morning.

STATEMENT OF ALVIN KNOERR, EDITOR IN CHIEF, ENGINEERING AND MINING JOURNAL

Mr. KNOERR. My name is Alvin W. Knoerr. I am editor of the Engineering and Mining Journal, and have been on that staff since 1944.

Prior to that time I was a mining engineer and mine plant designer for the Sunshine Mining Co. and the Idarodo Mining Co.

Prior to that time I was an instructor in mining and ore dressing and am a graduate of the Missouri School of Mines and started out as a miner, mucker, chute, blaster, and timberman in the mines of Colorado and Idaho.

The CHAIRMAN. I am glad to hear that. I was a mucker, myself, about 60 years ago.

Mr. KNOERR. It certainly will give a person a sympathetic attitude.

In this prepared statement I am going to refer to the Mineral Economics Factbook.

I am sorry I do not have enough to pass out to all the gentlemen here.

If you would care to introduce any of that into the record, you are at liberty to do so.

The CHAIRMAN. The document will be filed with the committee. The staff or committee members may wish to print excerpts from it.

Mr. KNOERR. Thank you.

Mr. Chairman, the purpose of these comments is to analyze the factors which have caused the domestic mining industry to go through 3 distress periods during the past 10 years, and have caused some of the small and medium high cost, but necessary producers, to shut down their mines.

Comments are based upon the close relationship that exists between the domestic mining industry and the international mining industry.

It is hoped that this analysis may assist in the formulation of policies and practices by industry and Government that will lead to a stronger domestic mining industry, and a less erratic international mining industry.

Reasons for distress in domestic mining industry:

1. Cyclic plunges of metal prices to subeconomic levels.

As shown on page 1 of the Mineral Economics Factbook, the prices of base metals has dropped to seriously low levels 3 times during the past 10 years. The index shown is based on the prices of copper, lead, zinc, aluminum, tin, mercury, and silver, weighted according to their relative importance to industry. These low levels occurred in 1949, 1952–53, and again in 1957–58.

It is during these periods that marginal producers are forced to curtail production or shut down completely. If we can determine the causes of these price dips, we will arrive at one approach to the establishment of a stronger domestic mining industry. The causes have been as follows:

A. Inability of the world metal producers to adjust their output to the inevitable swings that take place in the United States and world economy.

On page 3 we show one industry on which the mining industry depends heavily.

Notice the pattern of the automobile industry on page 3 of the Factbook. Since this industry used about 17.8 percent of the total United States consumption of steel; 7.1 percent of the copper; 42.4 percent of the lead; 28.2 percent of the zinc, and 13.6 percent of the nickel, it is obvious that changes in this industry from year to year will have a profound effect on the metal consumption of this country.

Likewise, the hard-goods production curve on the bottom of page 2 of the Factbook shows substantial swings in demand.

Failure of domestic and foreign producers of copper, lead, and zinc to adjust their production to decreases in demand causes overproduction and inevitably plunging prices.

The aluminum and steel industries are more fully integrated and, therefore, are more able to curtail output to conform to demand, and their price patterns for the past 10 years show this clearly.

B. Overproduction: Major mining companies virtually agree that the cause of the present crisis in the metals industry is a slight, but persistent overproduction by mines all over the world.

The charts pertaining to world consumption and world production of copper, lead, and zinc from American Smelting & Refining Co.'s annual report for 1957 show that the surplus metal production during the past 10 years has not been large, but that the effects of modest imbalances have a profound effect on prices.

And I am referring to the 1957 report of the American Smelting & Refining Co. which shows bar charts indicating a comparison of world consumption and world production.

There has been only a modest overproduction. Note the following statement in the 1957 annual report of the Phelps Dodge Corp., which states:

> The continued decline in price resulted from the fact that since the middle of 1956 world production has been in excess of consumption. The difficulty has been due to increases in production, for free world consumption of copper was again at record level in 1957. Percentagewise, the excess has been small. But the excess has been a continuing one and its inevitable effect has been a progressively weaker market and lower prices.

Three charts in the Mineral Factbook show at a glance how continued overproduction of metal causes price drops.

A. Copper: On page 8 of the Mineral Factbook we have a chart which shows production and prices and consumption. This copper chart on the bottom of page 8 shows how world refined stocks in the hands of producers started to rise in 1956.

This indicated overproduction. When the stocks in the hands of producers rise and rise persistently, we know that we are overproducing.

This overproduction on a month-by-month basis persisted throughout the balance of 1956 and all of 1957 with the result that both world and domestic prices tumbled from above 45 cents to the present levels of 20.5 to 25 cents.

This is shown in greater detail in the copper price chart in the middle of page 8 in the Mineral Factbook. The chart on production and stocks does not show what went to Government stockpile, but if these amounts had been added to producers' stocks, the serious extent of overproduction would have been much more apparent.

(*b*) We have lead charts also on page 8, which contain the same information: The position of stocks in the hands of producers, the

domestic prices and the month-by-month production, and also what went to stockpile in the form of a dotted line at the bottom of the chart which indicates that somewhere between five and ten thousand tons went to stockpile for most of 1954, 1955, 1956, 1957.

There were some points there where the Government did not buy. Here we see in 1953, and again in 1957, persistent accumulations of stocks in the hands of producers, which indicated overproduction and in these years lead prices either plunged or bumped along bottom at uneconomic levels.

(*c*) We have a similar chart for zinc at the top of page 11, showing the same facts. They clearly show how rising stocks in the hands of producers in 1953 and 1954, and again in 1956 and 1957, indicated persistent, but small overproduction and signaled price drops.

The three charts just mentioned show that the copper, lead, and zinc producers are slow in reacting to changing demands for their metals, and as a result, prices swing to extremes which are harmful to producers and metal consumers alike.

Experienced market men say that when metal stocks in the hands of producers rise above 45 to 60 days' production and continue to rise each month, metal prices are likely to start a decline.

The swings in demand in the zinc industry to which producers must learn to adjust their output more readily are shown at the bottom of page 11 of the Factbook.

Another cause of the low prices is excessive imports:

C. Excessive imports: The two charts on lead and zinc in the 1957 annual report of St. Joseph Lead Co. to employees indicates quite clearly that the excess of lead supply over consumption in the United States has been principally due to excessive imports.

This appears in this report to the employees of the St. Joseph Lead Co.

Owing to an inadvertent error in the preparation of the charts the surplus of lead over consumption levels should have been 219,000 tons for lead for 1957, and 110,000 tons for 1956.

The surplus of zinc over consumption levels should have been 355,000 tons for 1957, and 271,000 tons for 1956.

This error was due to the subtraction instead of addition of increases in stocks in the hands of producers which were available for consumption. Nevertheless, these changes do not detract from the clear evidence that excessive imports have been responsible for our troubles in the domestic industry.

These charts also show that when the domestic mining industry asks to have measures that will protect its level of production over, say, the past 5 years, it is not asking for anything at all unreasonable. Certainly if the domestic consumer of lead and zinc is to be protected against price squeezes in the future, our domestic lead industry ought to be allowed to produce at about a level of 400,000 tons a year, and the zinc industry at 400,000 to 500,000 tons of metal per year.

That is shown in a band here at the bottom of these two charts which shows that we are not asking very much when we want to protect that amount of production in the United States.

What aggravates the situation is the fact that virtually all of the world's surplus production of lead and zinc has sought outlet in the United States. One would think that some of the surplus would move

toward other nations which are substantial consumers of lead and zinc. To support this statement I quote from The Review of Nonferrous Metals in 1957 by the British Metal Corp., Ltd., which reports as follows—it is interesting that this comes from a British report and not from a domestic one:

> Thus, in 1957, there was an excess of [lead] supplies in the "rest of the world" [countries other than the United States], of about 460,000 tons, of which about 440,000 long tons went to the United States.

Speaking of zinc, this same report went on to say:

> Once again, virtually all the "rest of the world" [countries other than United States] surplus went to the United States and her net 1957 imports of 630,000 long tons (385,000 tons of zinc in concentrates and 245,000 long tons of zinc metal) were highest yet in a single year. (Reference Review of Nonferrous metals in 1957. The British Metal Corp., Ltd., pp. 12 and 16.)

All figures quoted above are in long tons of 2,240 pounds each.

II. Another cause of our problem is the stimulation of overproduction. Production of copper, lead, and zinc was stimulated to high levels by special incentives and contracts during the Korean emergency.

At this time this move appeared to be entirely justified, and no criticism of that policy is intended. However, we are in part experiencing the effects of that stimulation.

Secondly, wide price swings to high peaks stimulate excessive production in many of the marginal western mining areas which are now shut down to a large extent.

Thus, extremely high prices are not necessarily the best for the small or marginal producer.

Finally, diversion of copper, lead, and zinc, to Government stockpile are stimulants to excessive production and make it hard for mine producers in the United States and abroad to determine accurately what the true requrements of industry are.

The amount of lead which went to stockpile—as determined by inference—each month is shown in the primary refined lead data charts on the bottom of page 8 of the fact book. This is classified as "Other shipments" and the extent to which this inferred diversion to stockpile eased the impact of surplus metal on markets is clearly shown in the charts.

In other words, diversion to stockpile eased the surplus that was accumulating and kept prices up.

In a similar way, note the United States slab zinc chart on top of page 11 of the fact book where the shipments to government each month are quite substantial, and again show how much surplus metal has been taken off the market to support prices indirectly, but quite definitely.

III. A third factor is unpredictable Government stockpile and barter programs.

Changes in stockpile buying by government, and sudden shifts in policy in barter acquisition of metals can have a profound effect on metal markets and prices.

Note this quotation from the 94th annual report for the year 1957, St. Joseph Lead Co., page 5:

> The stability in price which the lead and zinc market had enjoyed for 15 months, was abruptly terminated in May 1957 following cessation of Government bartering of surplus agricultural commodities for strategic materials.

Here is British opinion of the same subject, also from The Review of Nonferrous Metals in 1957, the British Metals Corp., Ltd.:

> By itself the intake into the permanent stockpile would not have sufficed to hold up prices during the last half of 1956. But the lead market was further bolstered by the brandnew barter purchases—the United States Government's acquisition of lead against agriculture produce—from mid-1956 onward. These purchases continued into 1957 and it was when this program too, seemed in jeopardy, in April 1957, that the lead market's resistance gave way.

Again without being critical, it appears that the inability of the military to spell out clear-cut stockpile needs, and the oscillations in the Department of Agriculture which affect barter metal acquisition introduce an element of instability in world metal markets that alternately stimulates and depresses metal production and prices to the detriment of the domestic producer.

IV. Another item which is causing our domestic producers considerable difficulty is rising labor, freight, and materials costs.

The domestic mining industry is being caught in a double squeeze action imposed by increasing labor, freight and materials costs, and constantly declining grades of ore.

Page 10 of the fact book shows these trends for southeast Missouri's Lead Belt, and I am sure that they are characteristic of many other base metal-mining districts in the United States, as well.

For one thing, the cost of producing pig lead has gone up from 100 percent to 400 percent, that is an index, from 1939 to 1957.

Wages have gone up from 100 percent to 300 percent, and the grade of ore during that same period from 1939 to 1957 has declined from about 5 percent to less than 2 percent.

The copper price chart on page 7 of the fact book shows one estimate of how much copper can be produced in the world at various price levels. It is based upon a property-by-property analysis of costs to produce copper, and would indicate that the 30-cent level for copper will be needed to fill normal world requirements for copper.

This shows you can produce copper all the way from 10 cents a pound all the way up to above 30 cents a pound, depending on how rich your mine is and other problems.

But in order to produce about 2½ million tons for the world, which is less than the 3 million net that they used, the price would have to go to at least 30 or 32 cents a pound.

V. Another factor which contributes to our low prices in the metal mining industry is the failure of the copper, lead, and zinc producers to develop new uses for metal, and to stave off inroads by competitive metals.

If the producers of copper, lead, and zinc had been as zealous as the aluminum industry in developing new uses for metal at the consumer level, the present distressed state of these three metals could have been relieved appreciably.

Some aluminum companies have spent as much as 10 percent or more of their annual gross sales in "the area" of development and sales of new products for consumers.

The lead-zinc-copper industry is moving in that direction, but its allocations for research and new product developments are much too low. The average for most progressive industries including some nonmetallic mining firms is about 3 percent of the gross value of sales.

If the copper, lead, and zinc producers ever move into that bracket, we will see some astonishing results.

Another thing is the erratic buying habits of metal consumers. Manufacturers have a habit of eating into inventories when metal prices decline—as is the case at present—and the coming in frantically to buy when metals are scarce and prices are rising. They thereby contribute to the wide swings in prices which are good for neither producer nor consumer.

The net effect of this on the small and marginal producer is to stimulate unnecessarily high production following periods of high prices, which must be shut down when prices hit bottom.

I believe that through proper and persuasive appeal, metal sellers could educate and convince manufacturers that orderly buying habits are to the best interests of all.

Now, Mr. Chairman, I would like to evaluate a few methods of relieving this distress to our industry.

1. Voluntary adjustment of production of copper, lead, and zinc by domestic and foreign producers to conform to the ability of world markets to consumer metals.

I have gone on record in a number of editorials to convince metal producers that this procedure would be most palatable for all concerned; that at times it pays the stockholder handsomely to leave a little metal in the ground. Also that if large producers would cut back modestly, say 3 to 5 to 10 percent, depending upon which metal we are speaking about, widespread mine shutdowns could be alleviated and the little fellows, who are so necessary to our future, would be allowed to survive.

This message has been directed at a world audience of more than 20,000 readers, approximately one-third of whom are in foreign lands.

The steel industry and the aluminum industry automatically cut back when markets weaken, and such cutbacks are made on an entirely noncollusive and independent basis by various producers in the world.

2. Tariffs: Failure to adopt the policy stated above, will only invite tariffs and other import controls. The momentum which demand for tariffs and expiration of the Trade Agreements Act has now gained is evidence of this fact.

If tariffs are imposed, we will quite definitely incur an uncomfortable amount of ill will in neighboring countries in the Western Hemisphere.

Since we are heavily dependent upon some of these countries for iron ore, oil, titanium, manganese, nickel, copper, and to a lesser extent for lead and zinc, the imposition of tariffs involves a calculated risk—namely, that in fending off certain metals which we do not want, we may invite reprisals in the form of export taxes on metals which we do want, as well as other attacks on the profits and billions of dollars that have been invested by American citizens in these neighboring nations.

The second risk that we have to evaluate is the possibility that tariffs will place the cost of metals to American manufacturers substantially above the world markets. This will make it harder for American manufacturers to sell fabricated goods in the world markets which are getting more and more competitive now that European industrialization is increasing at astonishingly high rates.

Also manufactured foreign goods seeking outlets in the United States would have a competitive advantage that would result in a chain reaction of tariff increases and impositions on semimanufactures and manufactured goods.

I merely state that we will have to evaluate these results if we do put the tariffs on.

3. Quotas: Quotas are less desirable than tariffs because they might cause prices to fluctuate constantly, and this is one thing that copper, lead, and zinc consumers will object to.

In other words, if quotas are imposed, they will lead to a situation where they will have to be withdrawn, and once withdrawn, they will lead to a situation where they will again have to be imposed. This will cause the market price to hunt; that is, fluctuate constantly in a corrective manner.

Consumers will not regard quotas favorably.

4. International meetings of producers and consumers: During a recent trip to witness the dedication of International Nickel Co.'s new nickel project at Moak Lake, Manitoba, members of the American and Canadian press, members of the Canadian Parliament, members of the Canadian and Provincial Ministries of Mines, and mining men engaged in some pretty frank discussions about the dumping of American agricultural surpluses on world markets, threats of tariffs and quotas, and possibilities of curtailing oil and gas shipments to the United States.

One of the Canadian officials said "If we could only get together with the American mining men, I am sure that we could work all these problems out satisfactorily."

This suggested that perhaps if, say, copper producers and consumers of the world alike could sit down together and discuss problems frankly and objectively, some of our problems might be diminished considerably.

This is not a recommendation for any concerted or collusive action to fix prices, since consumers would soon squelch that, nor is it a suggestion to cartelize the metals industry, but merely to afford international mining men to face some of the facts which I have outlined in this discussion frankly and objectively.

I believe if we get at that problem of the constantly fluctuating prices which throw the little fellow in and out of business, we are going to establish a much stronger domestic mining industry.

I thank you, Mr. Chairman.

The CHAIRMAN. Thank you. You have given us a very fine analysis of the problems confronting us. The statistics you have given us will be very helpful to us in studying the problem.

Mr. KNOERR. I am sorry I did not have enough for the audience.

The CHAIRMAN. The document has been received by the staff and the committee will have access to it when it studies the situation.

Thank you very much.

Mr. KNOERR. Thank you, Senator.

The CHAIRMAN. The next witness will be Mr. Frank Knight, director, Arizona Department of Mineral Resources.

Mr. Knight.

STATEMENT OF FRANK KNIGHT, DIRECTOR, ARIZONA DEPARTMENT OF MINERAL RESOURCES

Mr. KNIGHT. Mr. Chairman, members of the committee, I am Frank P. Knight, director of the Arizona Department of Mineral Resources, with offices at Phoenix, and I thank you for the privilege of being heard.

There is general agreement that a healthy domestic mining industry is essential to a strong United States, but there is and has been disagreement both as to the health of the mining family and as to prescriptions for the various illnesses of its children.

Nine months have elapsed since Secretary Seaton submitted a domestic long range minerals policy which considered antimony dead, copper healthy, lead and zinc sick and the remainder healthy or prescribed for.

All were to be looked in on every 2 years, and it was assumed that Congress would take care of its Public Law 733 patients.

Arizona 9 months ago was worried about the copper situation, and now is gravely concerned about it.

Including the recently announced layoffs of 500 men by Miami, Kennecott and Inspiration, the total Arizona layoffs through either curtailment or shutdown procedure, involve approximately 1,200 men and an annual loss in wages of about $6 million.

The shortening of weekly hours from 45.0 in November 1956 to 40.7 in February 1958, and weekly earnings from $109.35 in November 1956 to $96.46 in February 1958, has resulted in an annual loss of wages for 13,900 copper mining employees amounting to $9,200,000.

A similar loss of overtime to 1,800 copper employees would amount to another $1,066,000 loss yearly.

Grand total wage loss, $16,286,000 yearly, or about 16 percent of the 1956 payroll of Arizona's copper industry. And this does not take into account the loss to employees of suppliers of goods and services to both copper and employees, which, as you know, amplifies it.

Beside the increase in unemployment and the loss of wages due to curtailment, the copper States are losing millions in sales taxes as well as income taxes; also, property taxes are less because of reduced valuation of the mines.

The Government of the United States is losing many millions of dollars in income-tax revenues.

Excess copper from low-cost foreign sources and Government-stimulated production has lowered the price below the cost of an estimated one-third of the domestic output. It has caused an estimated 7,500 layoffs and shortened the workweek of about 50,000 employees in the industry, plus many more in outside dependent industries.

It is estimated that only 20 percent of domestic production can match costs with the bulk of foreign copper, and to allow the remaining 80 percent to die because of lack of protection is unthinkable. Prompt and favorable action on S. 2998 is necessary.

Arizona's lead-zinc production now is nearly all from four mines, which are hanging on with dwindling hope that necessary relief will be in time.

Of the 40 Arizona producers of lead and zinc in 1956, these 4 are left. Twenty-eight producing mines employed approximately 860 people on January 1, 1957, and the estimated 300 now employed means 560 men, or about 65 percent added to the unemployed ranks. The loss in wages per year is about $3 million.

As with copper, these losses multiply as they influence the economy within the State and add to the already serious distress including the State's loss of revenue and of unemployment benefit reserves.

Manganese in Arizona has grown under Government nurture to a robust stature, but it is faced with extinction if that nurture does not continue long enough to allow it to complete its progress toward self-dependence.

Manganese research has resulted in improved techniques, and promises to place the industry on an independent competitive basis if support is extended an estimated 5 years. Without such a grace period, the domestic industry, so valuable to national security, will die.

Except for a small plant processing foreign ores, there is no tungsten activity in Arizona. Failure of Congress to appropriate for continued purchases pursuant to Public Law 733 resulted in great and unfair losses to the many producers who continued production on the faith that the purchase obligations under that law would be met.

United States Bureau of Mines 1957 preliminary figures show a drop from 186 short tons of tungsten concentrates produced in 1956, and valued at $636,686, to 3 in 1957, which got in under the wire to attain a value of $10,270.

Records show that 5 of Arizona's small producers offered 2,038 short-ton units to GSA that were not accepted. The difference between the Government price and the market meant a loss of about $80,000 if they sold.

Arizona's low iron chrysotile asbestos industry was encouraged by Secretary Seaton's recommendation of a mill to process all grades of fiber, to be partly financed by the Apache Indians. The hopes have died and the producers now ask favorable action on S. 3186 because they will be unable to produce, in the allotted time, enough asbestos to take up more than about 40 percent of the $2½ million appropriated last July for continued purchases under Public Law 733. They feel that the extension will allow the completion of milling facilities already started, which will put them in position to market grades of fiber now wasted and preserve the industry, which is so important to national defense.

Arizona's known mercury deposits are marginal and with the expiration at the end of this year of the Government's guaranteed price, they will be at the mercy of foreign production stimulated by United States stockpile purchases, unless they are protected by means of import controls.

The gold mines of Arizona are long dormant victims of "the errors of expediency" which should be corrected at least to the extent of a free market for the metal. Passage of Senate Joint Resolution 16 is urged.

Closing of the uranium buying station at Cutter and refusal to accept the ores at other points resulted in the complete shutdown of the uranium mines in the Globe area, with accompanying loss of invest-

ment of over half a million, and threw approximately 100 men out of work.

The mines at least should be allowed to ship to other stations under as favorable terms as those given by AEC to similar ores. Partial reopening of the station would alleviate the distress of the complete shutdown.

The final valuation of all Arizona producing mining property in 1956 was $305,209,076. This valuation was dropped to $245,920,040 in 1957 due to a disastrous drop in prices of copper, lead, and zinc.

Using a tax rate of $8 per $100, the tax loss to the State, county, and city would amount to 0.08 times $59,288,135 equals $4,743,000.

Sales taxes lost to the State, county, and city would amount to $1,242,371.

In addition to the combined loss of $6 million in property and sales taxes, the State also lost an estimated $2 million in State income taxes, based upon a reported $5,378,784 State income tax paid by the mining industry for the preceding year.

The income of most mining companies has been more than cut in two during 1957, State tax commission reports from the basis of the above data. Additional losses to the State would occur from decreased individual income taxes and sales taxes on individual purchases.

The 1957 assessed valuation of all Arizona mining property was 20 percent of the total of the State.

In 1956 it was 25 percent of the total.

In 1958 it will again lower.

The value of Arizona's mineral production shrank from $479,551,000 in 1956 to $360,626,000 in 1957, according to United States Bureau of Mines preliminary figures which did not include uranium or manganese shipments to GSA.

Further shrinkage is in prospect for 1958 unless there is Government action.

Arizona and its people are hurt and worried, and this hearing is gratifying recognition of the need to do something about it.

The administration, in considering the matter, is faced with the relative importances of a healthy domestic mining industry as against undisturbed relations with friendly foreign countries.

That the administration seems to lean toward the latter, indicates a lack of knowledge of all that constitutes a healthy domestic mining industry and the seriousness of risking loss of a substantial part of that industry, which is so vital to national defense.

A healthy mining industry is a profitable one with roots going out in the form of contained prospecting and development of ores, prompted by chance of profit.

Evidently the administration hopes for curtailment by foreign producers to help maintain prices that will yield profits to domestic miners, but the miners believe such hopes unrealistic and can see no hope without adequate import controls or the unfavored alternative of Government subsidies.

In other words, they disagree with Mr. Knoerr.

The damage risked by sacrificing any part of a healthy domestic mining industry is, of course, irreparable and of wide consequence. It would have serious effect upon venture capital and the morale of the whole industry.

It has been emphasized that mines cannot be turned off and on, and it should also be understood that they are not turned on without exceptional risk of considerable money and time.

Mining needs a favorable atmosphere to attract venture capital. Canada has greatly profited by establishing such an atmosphere, which provides, among other things, 3-year tax exemption for new ventures.

Germany has produced a highly respected mark and an "economic miracle" with government economy, and reduction of income taxes. They should work as well here and release some of the venture capital that mining must have. They also would help keep that capital in this country.

The mapping of the United States Geological Survey and the research of both the United States Geological Survey and the United States Bureau of Mines are highly commended and should be expanded.

DMEA is important, but it should have a companion program. The Small Business Administration loans are not placed where the risks are high as with small mining ventures. With DMEA the Government assumes a high percentage of the risk of exploration. There is as much reason for it to participate in the risk of development beyond exploration to the production state and a defense minerals development program is needed. There should be no pauper's oath requirements in either.

An Arizona copper mine announcement of a layoff of 390 men on April 1 is the first large one and raises fears of more to come. The mounting distress of such blows to employees, employers and property compels attention. That a healthy domestic mining industry is vital to national security is indisputable and should be sufficient reason for action against the principal cause, the oversupply of low-cost foreign and government stimulated metals, and soon.

Thank you.

The CHAIRMAN. Thank you very much. I believe the information you are giving us will be of great value.

It is very gratifying to have men so closely connected with the industry appear before this committee and give it information such as you are presenting this morning.

Mr. KNIGHT. Thank you, Mr. Chairman.

The CHAIRMAN. The next witness will be Mr. A. B. Parsons, representing the Arizona Copper Tariff Board.

Mr. Parsons.

STATEMENT OF A. B. PARSONS, ON BEHALF OF ARIZONA COPPER TARIFF BOARD

Mr. PARSONS. Mr. Chairman, I have a paper here. If agreeable to you, I shall be glad to read it.

The CHAIRMAN. That will be satisfactory.

Mr. PARSONS. My name is Arthur B. Parsons. I am a mining engineer and mineral economist, residing in Oakland, Calif. I am appearing today in behalf of the Arizona Copper Tariff Board, the Arizona Small Mine Operators Association, and the domestic copper mining industry in general.

In 1951 and 1952 I was director of the Program Development Division of the Defense Materials Procurement Agency, generally known as the DMPA.

As you know, 95 percent of the work of this Agency had to do with metals and minerals in the category known as critical and strategic.

Stated briefly, the function of the DMPA was to assure the Nation, insofar as possible, an available supply of these metals and minerals in adequate quantity to meet 5 years of defense needs.

The problem of procurement required that new sources be found. New deposits had to be opened and equipped for production.

Facilities at mines already operating had to be expanded.

To accomplish these objectives, the Government extended various kinds of financial help to private industry as an inducement to engage in new enterprises.

A cardinal principle guiding the whole effort was: "Get it in the United States if reasonably possible."

The next preferred sources were Canada and Mexico, and a not-so-good third choice was the rest of the Western Hemisphere.

The reason for this sequence of preference can be stated in one word, "submarines."

As your committee well knows, during critical months of World War II, 85 percent of the cargo vessels coming from Africa were sunk by submarines.

I mention these things because, in my opinion, one of the basic and compelling reasons for developing a long-range mineral program is national security. If the threat of war were wiped out, there would be far less urgent need for your deliberations here today.

I do not mean to imply that the domestic mining industry, as such, is not a highly important part of the economy and that in the public interest, must preserved. But national security is basic.

A long-range mineral program is essential, but it presents more than one problem, in fact, many problems, because there are at least a dozen metals and minerals of high strategic importance. I do not suggest that there are no elements of similarity in the situation of the various metals, but I do not know of two sets of conditions that are precisely alike. A few of the circumstances that vary are—

(1) Normal ratio of domestic output to imports.
(2) Potential expansion at producing domestic mines.
(3) Existence of low grade domestic resources.
(4) Potential supplies from foreign mines.
(5) Geography, political as well as physical, of foreign sources.
(6) Relative cost of production in various countries.
(7) Wage scales and living standards in countries that are potential producers.
(8) Relative hazards of procurement, including transportation.
(9) Consideration of international relations.

The list could be expanded, but the foregoing point up the complexity of the matter.

On the other hand, one vital condition may be mentioned that is essential to a sound long-range program for any strategic metal.

Assumiing that domestic deposits actually exist that can be made to yield a substantial proportion of domestic requirements at feasible cost, the producing industry must be maintained as a healthy, vigorous, going part of the domestic economy.

The Federal Government can take various measures to provide a climate in which an industry of this kind can thrive. One of these measures will be pointed out in the discussion of copper that follows.

But again I must stress the belief that the selection of the best medicine depends on the particular metal concerned, even though the malady may be the same.

The case for copper mining is particularly strong. The arguments are persuasive why Congress should not only safeguard the domestic industry, but should make every effort to strengthen and foster it.

The industry has the equipped capacity to meet current demand in full, and for the next few years it surely can provide at least 80 percent of domestic requirements.

Copper mining is a long established, sound, and substantial business. Including smelting and refining, it represents a capital investment, on a replacement basis, of about $2.2 billion in facilities, plant, and mine development.

The domestic industry spends an estimated $500 million annually in operating expense in addition to large amounts required annually to keep plant and equipment up to date.

In normal times it gives employment directly to at least 50,000 people, and indirectly to many additional thousands.

It is an important user of fuels, electricity, cement, explosives, steel, machinery, automotive equipment and power shovels.

It generates large tonnages of long- and short-haul freight.

It pays substantial taxes to local, State, and Federal governments. For several States, tax payments by the industry constitute a substantial proportion of their total revenues.

As an important segment of the economy of the Nation, copper mining merits the attention of Congress, but over and above all this, is its preeminent position as a supplier of the most nearly indispensable strategic metal, in short, copper mining's leading role in national security.

This, in my opinion, is an overriding consideration in any long-range mineral program.

You have heard a detailed account of the deplorable condition presently existing in the principal copper-mining States. Arizona in particular has been discussed, but the situation is equally serious in Utah, New Mexico, Michigan, Montana, and Nevada.

It is estimated that payrolls usually totaling $250 million annually have been reduced by 20 percent, or $50 million, as a consequence of shutdowns and curtailment of output at domestic mines.

Part of this results from the actual layoff of 7,000 men—parenthetically, I believe that 7,000 is too low—part results from the shortening of the workweek at many properties, sometimes to as few as 4 days per week.

You have heard described the distressing effects of this reduction on the mining communities themselves and on the surrounding regions.

You have heard discussed the bad effects of shutdowns on the physical condition of the mines, and the threat of resulting waste of valuable ore reserves. The domestic copper mining is, in fact, demoralized.

However, I shall not dwell on these phases of the problem. Instead, I shall endeavor to describe the reasons for the existing unhealthy situation, and will then suggest what I regard as the most practical

and effective measure available to Congress for alleviating the ills of the domestic copper industry.

Again I stress the fact that I would not propose this particular prescription for more than a few strategic metals, but for copper, I regard it as being ideal.

It is the first necessary step in a long-range program for copper, as I see it.

The general business recession of 1957–58 and the consequent shrinkage in industrial consumption no doubt has contributed to the drastic decline in the domestic market price for copper.

However, trouble in the copper market started early in 1956, long before any softness appeared in the economy as a whole.

In other words, one must look deeper than the slump of 1957–58 to diagnose the predicament of the domestic copper mining industry.

Primarily, the deterioration is the result of surplus production generated by the existence of about 400,000 tons of annual capacity in the world in excess of the present rate of demand. Several significant facts, however, should be noted:

1. So far as the productive capacity of domestic mines is concerned, almost all of the expansion came about through the action of the Federal Government, following commencement of hostilities in Korea.

To induce domestic companies to expand their facilities and to launch the exploitation of numerous new copper deposits, the Government proferred financial aid of various types, primarily commitment-to-purchase contracts at a floor price.

Other forms of aid, widely accorded, were the privilege of rapid amortization, of the capital cost of new facilities, and financial assistance in the form of loans.

2. At present domestic producing capacity and domestic demand are in close balance. Consequently, the 400,000 tons surplus exists entirely at foreign mines.

3. The present position is aggravated and the outlook for the future is darkened by the fact that a further expansion of 600,000 tons in equipped capacity is definitely projected for foreign properties.

4. Such curtailment as was effected during 1957, in an attempt to balance output with demand, was at mines in the United States. The deterioration in the domestic market has been a direct result of imports forced on the market by foreign producers at progressively lower prices.

All the evidence points to the conclusion that foreign copper will be forced on the domestic market in increasing quantities, and that it will displace domestic production in substantial quantity.

The reasons why most foreign producers will choose not to curtail output are various, but one is that, for the most part, they can produce so cheaply that they can make a profit at prices so low that at least one-third of the domestic production cannot survive if it must compete.

The accompanying table summarizes the situation as it will exist in 1961. The year 1961 is selected for the purpose because, between now and then, the great bulk of the projected new foreign productive facilities will be ready for operation.

(The table referred to follows:)

Free-world copper position in 1961

[In tons]

	United States, domestic	Foreign
Expectable demand	1,300,000	1,900,000
Equipped capacity at indicated cost:		
Below 17 cents	260,000	1,950,000
Between 17 and 25 cents	584,000	825,000
Above 25 cents	450,000	128,000
Total	1,294,000	2,903,000
Deficit (−) or excess (+) capacity over demand	−6,000	+1,003,000

NOTE.—All figures relate to newly mined copper.

The figures are necessarily estimates, but they have been made after long and careful consideration of historical statistics and of facts well known to those who are engaged in the copper-mining industry or are close students of it.

To arrive at the figures for expectable demand, the actual annual world consumption from 1910 to 1957 was plotted on graph paper and a trend line was established. This trend line, when extrapolated to 1968, showed world demand in 1961 to be 3,200,000 tons. Significantly, this figure is about 50,000 tons more than the corresponding figure established by the so-called Paley report issued in 1952 by the President' Materials Policy Commission, that was regarded as a very optimistic report, as you know.

This fact tends to confirm the view that 3,200,000 tons is, at least, not too low. The division of total demand, between foreign and domestic categories, is based on the assumption that the approximate ratio of consumption existing in 1956 and 1957 will obtain in 1961.

The tonnages for equipped productive capacity are based on past preformance for individual mines now producing and on firm plans, publicly announced, for expansion of facilities and for the equipment of new properties.

The allocation of the individual mines to 1 of the 3 cost groups shown in the table, is based on common knowledge of informed people in the copper-mining industry, including engineers, economists, and executives, supplementing such information as is disclosed in published company reports.

The significant facts shown by the table are these:

1. By 1961 the mines of the world will have an equipped capacity to produce 1 million tons more copper than will be needed.

2. This surplus, in its entirety, represents foreign capacity in excess of foreign demand.

3. After matching total foreign demand, there remains foreign capacity of 875,000 tons at a cost of under 25 cents per pound.

The plain and ominous fact is that this tonnage hangs over the United States domestic market.

4. Only 260,000 tons of United States capacity—representing a single mine, incidentally—can achieve a cost competitive with the great bulk of foreign capacity.

5. One-third of the domestic capacity, or 450,000 tons, has a cost above 25 cents. The conclusion is inescapable that if events are permitted to take their course the groups of mines representing this 450,000 tons cannot survive.

Moreover, the entire domestic industry will feel the effects. A partly moribund industry will lack the incentive to search for new deposits, to develop and exploit those that already are known, but that are not producing, and to convert "near ore" into ore.

National resources will be wasted. The Nation as a whole will suffer.

The foregoing leads to this vital question: Assuming that Congress views such an eventuality with alarm, what can it do by way of remedy?

It is too much to expect that any enactment by Congress can take a specific action that will alleviate the gravity of the situation.

As is well known, Congress has before it now a number of identical bills dealing with the import tax on copper. With your permission, I will describe them briefly, try to explain why they are sound, reasonable, and desirable, and why they offer the best prospect for lessening the threat to the domestic industry caused by the huge excess supply of foreign copper that threatens the domestic market.

The bills now pending before the Senate and the House would do three things—

(1) Reestablish the excise tax on imports of copper at the rate of 4 cents per pound.

(2) Increase the peril-point price below which the tax becomes effective from 24 cents to 30 cents per pound.

(3) Provide that the tax be lifted automatically whenever the market price is at or above the peril point, this last being a new feature.

The domestic copper industry was first threatened with a flood of low-cost foreign copper about 1931, following a period of great expansion in productive capacity in Chile, Canada, and Africa.

Faced with this situation, and recognizing the importance of maintaining the health of the domestic mining, industry, Congress in 1932 enacted an excise tax of 4 cents per pound on imported metal. Since that time, the tax has been reduced by Executive action under the terms of the Reciprocal Trade Agreements Act.

However, Congress has consistently retained the tax since its original enactment, even though in the interval it has made a thoroughgoing revision of the Internal Revenue Act.

By enacting the pending legislation, Congress would only be reaffirming its basic policy, and would merely reestablish a rate that is more nearly in line with the needs of the present situation than the 1.7 cents scheduled to go into effect on July 1.

It is worthy of note that, when the 4-cent import tax was enacted, copper was selling for about 5.5 cents per pound, so that, on an ad valorem basis, the duty was, roughly, 75 percent.

On the basis of the 25-cent price prevailing today, the 4-cent rate is only 16 percent ad valorem.

To what extent a reestablished 4-cent rate would be effective in attaining the desired objective, no one can say with assurance. That it would be helpful, no one questions. Certainly, it is not extravagant.

The principle of the peril-point price is not new. In the legislation of 1951, Congress provided, in effect, that the import tax would become effective only if the price should fall below 24 cents per pound.

Similar provision was made in the legislation of 1953, 1954, and 1955.

The reasoning was simple and logical. Congress desired to permit foreign copper to come in duty free so long as it did not thereby inflict serious injury on the domestic industry. It was believed that a practical and rational measure of such possible injury was the ruling price. So long as the price was not unduly depressed, reasoned Congress, the domestic industry should have no cause for complaint.

Only in the event of a drop below the peril-point price did the duty become operative.

What the bills now pending provide is simply this: That the peril-point price be increased from 24 to 30 cents. It is evident that a peril point of 24 cents would be meaningless to those domestic producers—representing one-third of the total capacity—whose costs are in excess of that figure.

A reasonable basis for determining the appropriate peril point is to relate it to comparative production costs in 1951—when first enacted—and in 1957.

The Arizona Department of Mineral Resources has developed a set of well-authenticated figures in which the percentage increases in the principal elements of production cost are combined.

The result is weighted overall percentage of 33.1. Applying this to 24 cents, the comparable peril-point price in 1957 would have been 32 cents.

As of today, the figure would, doubtless, be somewhat higher; certainly, 30 cents is anything but exorbitant.

The last provision is the only one of the three listed that is new. It should meet universal approval, even among foreign producers who might be inclined to oppose the bills. It provides this: If, for any reason, the domestic market improves and the price advances above the peril point, the import tax will be lifted automatically, and the domestic market will be open to foreign copper on exactly even terms.

The authors of the pending bills, and the domestic industry agrees, make it clear that they do not propose to exclude foreign copper by erecting a prohibitive tax wall. The duty would be in effect only when it was needed to give high-cost domestic producers a more nearly even break.

Taken in combination, the three provisions may be described as follows:

They constitute a method of handicapping, so to speak, to make competition between foreign and domestic producers in the domestic market more nearly even. The 4-cent tax is like added weight assigned to the stronger horse in a race by an official handicapper.

In combination, the peril point and the automatic "on-off" features say, in effect, "If the domestic horse gets stronger, we will remove the weight from the foreign horse."

In my opinion, the enactment of the pending bills is the one practical, fair, and reasonable measure available to Congress to further a sound program for copper. The reasons may be summarized as follows:

1. The domestic industry is able, and will continue to be able, to supply 80 percent or more of the expected demand.

2. Such demand can be met by output of long-established mines and mines that have been brought in in the last 5 years at the urgent request of the Federal Government.

3. The current excess equipped capacity of the world—400,000 tons annually—and the prospective equipped capacity in 1961—600,000 additional tons annually—is, and will be, at foreign mines.

4. The great bulk of foreign copper can be produced much more cheaply than 80 percent of domestic production, and the remaining 20 percent is from a single domestic mine.

5. The chief reason for this production-cost advantage is lower wage scales and lower standards of living in countries having the big productive capacity.

6. The proposed rates—4-cent tax and 30-cent peril point—are modest.

7. Under the three-point plan, foreign copper has duty-free access to the domestic market when the price is high enough to let the domestic mining industry live, and the arrangement to lift the duty is automatic.

8. Largely because of point 7, the proposed plan will minimize possible interference with foreign trade and any resulting harm to international relations.

To repeat, it seems to me that the enactment of pending bills now before Congress is a first and essential step in a long-range program as it relates to copper.

Thank you.

The CHAIRMAN. Thank you very much. I think you have given us a fine statement this morning, and your views are in accord with the views of the committee. I am sure it will be very helpful to the committee.

Mr. PARSONS. Thank you, sir.

Mr. REDWINE. Mr. Chairman, our next witness is Mr. Bradley.

Senator Dworshak is on his way over but he would like to be here when Mr. Bradley testifies.

In the meantime I have 2 or 3 things to put in the record.

Mr. Chairman, in your opening statement you pointed out that you had received a letter from Secretary Seaton in which the Secretary said he would like to appear before the middle of April. You then asked him to set a definite date.

This morning you received a letter from him suggesting that April 28 was appropriate. I think this letter from the Secretary should go in the record at this point.

The CHAIRMAN. Very well, it may be carried in the record at this point.

(The letter referred to follows:)

WASHINGTON, *March 25, 1958.*

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

DEAR SENATOR MURRAY: Thank you for your very kind letter of March 17 concerning my appearance before your committee in regard to your minerals hearings.

In view of the fact that Assistant Secretary Hardy has a speaking engagement in Alaska and will be out of town between approximately April 17 and

22, and I have prior commitments on both the 16th and the 22d of April, April 28 would be an agreeable date for our appearance. I hope that this date will prove acceptable to you.

Thank you very much for your consideration.

Sincerely,

FRED A. SEATON,
Secretary of the Interior.

Mr. REDWINE. In view of the fact that there are so many witnesses still to appear, Mr. Pardee has graciously agreed that he not appear as a witness, but that his statement be printed in the record.

The CHAIRMAN. The statement of Mr. F. G. Pardee for the American Iron Ore Association, will appear in the record at this point.

(The statement referred to follows:)

STATEMENT BY F. G. PARDEE FOR THE AMERICAN IRON ORE ASSOCIATION

Exploration for new deposits of raw materials needed for the support of our economy and the maintenance of our standard of living is of vital importance to our economy and should be encouraged by the United States Government.

The Internal Revenue Code for 1951 recognized this, in part, when it allowed mining companies to deduct their exploration expenses up to $75,000 annually for a period of 4 years. The 1954 Code (sec. 615) continued this recognition and increased the deduction of exploration expenses up to $100,000 annually, but did not extend the 4-year period.

The deduction of only those exploration expenses of a taxpayer which do not exceed a total of $100,000 per year, limited to a period of 4 years, does not recognize the practical situation as it exists today. Exploration as it is now conducted is done by teams using expensive equipment and involving large areas incurring expenditures, at times, of millions of dollars. Exploration must be a continuing effort and cannot be limited to 4 years if we are to replace the vitally needed minerals which are being consumed at a great rate by our present day economy.

Iron ore is a good example of this problem since iron ore is normally consumed at a rate of over 120 million gross tons annually. To replace this much raw material requires continuing exploration programs year in and year out and, since the readily discovered deposits have long since been explored, it is necessary to incur substantial expense to find replacement deposits.

Government committees, commissions, and agencies have long recognized this fact; for example, in 1952 the President's Materials Policy Commission (the Paley Commission) recommended that exploration expenditures for minerals (other than oil and gas) should be fully deductible for income-tax purposes. The following is quoted from the report of the Commission:

"The changing pattern of the materials we use has thrown the minerals, particularly our mineral deficits, into sharp focus. Year after year, the industry of the United States has consumed more and more mineral stuffs, chiefly as fuels to provide energy and as raw materials to shape into the manifold products that our expanding economy demands. The quantities used in 1950, huge in comparison with those of 1925, are small when set against the probable requirements of 1975. * * *

"In the field of public policy the greatest emphasis should be placed upon encouraging exploration for minerals. * * *

"The Commission believes strongly that exploration and development costs for minerals should be fully expensible for tax purposes because of the direct incentive this arrangement gives for capital to take risks in highly uncertain fields. The Commission therefore recommends that the present limitations applicable to minerals other than oil and gas on the amount of permitted expensing of exploration costs be removed."

We feel your committee's recognition of the importance of allowing the full deduction of exploration expenses would be an important step in providing the necessary incentive in replacing the iron ores and other ores which are now being consumed in such large tonnages each year.

The CHAIRMAN. Mr. John Bley, vice president and general manager of the American Chrome Co., is our next witness.

STATEMENT OF JOHN BLEY, VICE PRESIDENT AND GENERAL MANAGER, AMERICAN CHROME CO., NYE, MONT.

Mr. BLEY. My name is John Bley and I am vice president and general manager of American Chrome Co., which operates a chromite mine and mill at Nye, Mont.

I want to thank the chairman and the members of the Interior and Insular Affairs Committee for the privilege of allowing me to present my statement and also thank you for the interest you have shown in the welfare of the mining industry over a period of years.

Some of the points of information in this statement are repetitions of points which were presented by me at a similar meeting of this committee in July 1957.

My company was incorporated in December 1950. In April 1952, it entered into contract No. GS–OOP(D)–12272 with the United States Government, Defense Materials Procurement Agency, succeeded by General Services Administration, to produce 900,000 tons of chromite concentrate at a grade of 38 percent Cr_2O_3 or better, production to be over an eight-year period ending December 31, 1961, or until the company delivers 900,000 tons of concentrate, whichever occurs first.

The company subsequently invested $2,500,000 for the acquisition of property, construction of housing facilities, equipment, expendable supplies and working capital. This was in addition to the investment of $2,165,000 provided by the Government to reequip the concentrator, tramway, and mine.

Contracts were entered into during May, August, and September 1952 for housing construction, installation of aerial tramway and installation of concentrator equipment. During the same period the company staff supervised rehabilitation of the mine, installed equipment and made periodic inspections of the work completed by contractors. This work progressed until limited mining started in May 1953.

The concentrator began operation August 10, 1953, at a rate of 455 tons of ore a day. Production was gradually increased, despite experiments in both mining and milling methods during the breakin period, until February 1954 at which time the goal of 1,000 tons of ore milled per day was achieved.

In addition to the time required to incorporate, acquire leases, and negotiate terms for the contract, it required approximately 1 year to bring the operation to the breakin stage, even though mine facilities and concentrate for buildings already existed.

This time requirement emphasizes the importance of maintaining a continuous operation of Nye, Mont., as world conditions can so quickly affect the supply of chromite ore obtainable by the United States.

The American Chrome Co. is more than fulfilling its contractual obligations to the Government, with concentrate deliveries some 40,000 tons ahead of schedule. The all-gravity concentrating system has produced over 500,000 tons of concentrate to the end of February 1958 with an average content of 38.5 percent Cr_2O_3; 0.5 percent above the 38.0 percent Cr_2O_3 required by the contract. The total tons of ore milled to the end of February 1958 were 1,165.469 tons (roughly 250,000 tons per year) at an average grade of 20.36 percent Cr_2O_3.

Proven ore reserves now developed above the main haulage level are sufficient to meet the remaining requirements of the present Government Contract, with enough ore left to continue operations after that time at the same rate for approximately 1½ years.

Through company efforts, the ore reserve has been increased approximately 2,500,000 tons by extensive diamond drilling and some development below the main haulage level. However, the geology of the deposits is such that in all probability the actual tonnage exceeds the above figure many times over.

Since its organization, the company has not been content to merely fulfill its contractual obligation, but at its own expense has pursued vigorously a research and development program with the view of providing an operation that would be capable of continuing on a competitive domestic basis after the present contract is completed. These possibilities have been studied in both the company laboratories and other research centers.

One phase of the program shows the feasibility of directly smelting the presently produced chromite concentrate to ferrochrome with the following specifications: 50–55 percent chromium, maximum 8.5 percent carbon, maximum 6 percent silicon with the remainder being iron.

A special market survey shows that the steel industry approves the use of this grade ferrochrome. In addition, the survey confirms that the long-term trend is toward the use of lower chromium content ferrochrome and the utilization of the iron naturally associated with chromium.

Definite advantages in using the aforementioned ferrochrome include—

(1) Lower price per pound of chromium content than higher grades of ferrochrome;
(2) Lower melting point;
(3) Usable iron at no additional cost;
(4) Unusually low sulphur and phosphorous content.

Consequently, as a result of these studies and in order to complete the job started by the company and to be in keeping with the original intent of both the company and the Government to provide a chromium industry based on domestic ore at Nye, Mont., my company submitted a comprehensive proposal to the Government on May 25, 1957, to convert Government-owned chromite concentrate to ferrochrome. This proposal was declined by the Government in July 1957. Some of the more important points emphasized in the company proposal are as follows:

1. The Government stockpile of chromite concentrate presently being accumulated will be converted into ferrochrome readily usable by the steel industry at total cost to the Government approximately equal to current market prices for ferrochrome.

2. In the form of ferrochrome there will be no loss in transportation or stockpiling, and stored ferrochrome stockpiles the power, labor, and time which are all essential to conserve should there be a defense emergency.

3. It would be wise, for defense reasons as well as for other reasons, to have domestic chromite mining, milling, and smelting facilities integrated into one efficient unit at Nye. These facilities could easily be expanded if the occasion should arise.

4. The ferrochrome industry, which is dependent almost wholly upon imported ores, is of such major importance to our industrial life that disruption of transportation or mining facilities outside our national boundaries could be a major setback.

5. The know-how for mining, milling, and smelting of low-grade chromite ores will be proven and, in addition, the methods will be continually developed and improved.

6. Reserves of chromite ore will be increased by the developments which would accompany the operation.

7. Initiation of a ferrochrome smelting industry at Nye would have a good, long-range future based upon the largest known domestic reserves, the Stillwater chromite deposits, which the Bureau of Mines estimates to be 80 percent of the known reserves on the North American Continent.

8. A saving in freight is realized by processing the concentrate to ferrochrome at the site, since 2.4 tons of concentrate produce 1 ton of the smelter product, ferrochrome.

9. The company will continue to pursue vigorously its sales program and desires the option to purchase any amount of ferrochrome from the Government for sale to the trade.

10. The company would furnish its own capital funds for the smelting facilities.

Although this proposal was not accepted, our company continued its investigations and made plans to construct a ferrochrome pilot plant at Nye, Mont. Through negotiations with the Government, an amendment was made to our contract which will allow the company to produce 40,000 tons of concentrate above contract requirements for use in the pilot plant to produce ferrochrome for sale to industry.

These facilities will be entirely financed and operated by the company. This plant, in its initial stages, will produce 5 tons of ferrochrome per day and production can eventually be increased to 15 tons per day. The construction of this plant is now in progress.

The Stockpile Advisory Committee report of January 28, 1958, to the Honorable Gordon Gray, Director of the Office of Defense Mobilization, supports our position in this matter. The more important points emphasized by the report are enumerated as follows:

1. Strong emphasis would be placed on stockpiling finished items.

2. Dependency on foreign sources for chromite ore would be alleviated.

3. Materials not meeting stockpile procurement specifications should be upgraded when feasible.

4. Subspecification minerals should be disposed of, preferably in a manner designed to encourage development of processes for treating low-grade domestic ores.

5. Stockpiles of strategic and critical materials should be of great value in the recovery and rehabilitation period in the event of a major catastrophe, especially because they represent stockpiled power, manhours, transportation and facilities.

6. Consumption of most metals and minerals has increased with our industrial expansion and may be expected to increase rapidly in the rest of the free world as the underdeveloped countries industrialize, thus creating greater demand and increasing prices for those metals and minerals.

7. More effort should be directed toward the use of lower grade ores, since the grade of many ores being mined is declining.

My company has always viewed its chromite project on a cooperative basis with the Government. The company has always been firm in its belief that it was obligated by the spirit of the contract to prove itself an efficiently operated company and, at the same time, to conduct all necessary research toward the goal of providing an economic chromium industry based on domestic ore.

It never has been the intent of my company that the Government should provide all finances or a permanent subsidy. We do believe that our country should have a domestic chromium industry and, in order for it to gain foothold in our American free enterprise system, it is important that help be given during the early stages of such an industry.

During this period the company will have further opportunity to effect more efficiency and economy learned through operation of an integrated mining, milling, and smelting operation, develop a market for the finished product, and develop means of solving the problem of high freight rates.

The United States should have a positive source of chromite concentrate based on domestic ore for the production of ferrochrome, chromium metal and chrome chemicals.

In 1957 approximately 211,000 tons of ferrochrome, 2,400 tons of chromium metal, and 110,000 tons of chrome chemicals as sodium dichromate equivalent were used, all produced from foreign ores and concentrates. Over 2 million tons of chromite ore were imported, mainly from Turkey, Union of South Africa, Rhodesia, New Caledonia, and the Philippines.

While these 2 million tons of ore were being imported, only 160,000 tons, or 8 percent of imports, were being produced in the United States. The American Chrome Co. at Nye, Mont., accounted for 75 percent of the domestic production; mining, milling, and stockpiling chromite concentrate for the Government at a cost per pound of contained chromium which compares favorably with foreign ores.

The long-range problem of the domestic chrome industry is not simply one of high mining costs as compared with mining costs of foreign competition. The problem is how to economically convert our lean domestic chromite ores into a product that the steel mills of our Nation will use.

Desirable as it is to stockpile our lean domestic ores against an emergency, it is not enough if realism is to prevail. Steps must be taken before an emergency arises. We need to completely develop the technology, know-how and the experience of turning these stockpiled ores into products readily usable by the steel industry.

Therefore, Congress should declare it a national policy that steps be taken to vigorously pursue projects for economically converting low-grade domestic, strategic stockpiled ores into products readily usable.

Such a declaration of policy by the Congress would be a tremendous stride forward in creating a ferrochrome industry based on domestic ore. In summary, some of the most important benefits of such a program are:

1. An efficiently integrated mining, milling, and smelting industry at the site of the largest known chromite reserves on the North Amer-

ican continent is in keeping with the Government's policy of strengthening the domestic mining industry and alleviating the strict and nearly total dependency on foreign chromite.

2. Consumption of most metals and minerals has increased with our industrial expansion and may be expected to increase rapidly in the rest of the free world as the underdeveloped countries industrialize, thus creating greater demand and increasing prices for those metals and minerals.

3. More effort will be directed toward the use of lower grade ores since the grade of many ores being mined is declining.

4. The chromite industry using domestic ore will be aided and encouraged in its efforts to establish an integrated chromium industry for the United States.

5. The Government stockpile of chromite concentrate presently being accumulated will be converted into ferrochrome ready for use by the industry at total cost, including concentrate and smelting costs, to the Government approximately equal to current market prices for ferrochrome.

6. Employment would be increased in a critical area.

Mr. REDWINE. Mr. Chairman, may we have a short recess to enable Senator Dworshak to hear this witness?

The CHAIRMAN. Senator Dworshak wishes to be present when the next witness testifies, so we will take a recess for 5 minutes while we await his arrival.

(A short recess was taken.)

The CHAIRMAN. The hearing will please come to order.

The next witness is Mr. James P. Bradley, Bradley Mining Co., San Francisco, Calif.

Senator Dworshak, do you wish to make any comment?

Senator DWORSHAK. No, I will wait until Mr. Bradley completes his statement.

STATEMENT OF JAMES P. BRADLEY, BRADLEY MINING CO., SAN FRANCISCO, CALIF.

Mr. BRADLEY. I am James P. Bradley, vice president of the Bradley Mining Co., San Francisco, Calif.

My testimony will be principally on the subject of tungsten, but I wish to mention that my company has in the past been one of the major domestic producers of three strategic metals—antimony, mercury, and tungsten.

Due to a combination of rising costs, increasing foreign competition, and a financial loss resulting from our company's having continued tungsten production in good faith under Public Law 733 until the summer of 1957, we have been forced to discontinue production at all of our mines.

The plant at our Yellow Pine Mine, Stibnite, Idaho—formerly the largest domestic producer of both antimony and tungsten—is now in the final stages of liquidation.

For the time being, we are holding the plant intact at our Ima tungsten mine at Patterson, Idaho, in the hopes that the Government may take some action to bring about the survival of the domestic tungsten industry.

The outlook for the domestic tungsten miner in the face of competition from nationalized foreign mines is very discouraging.

As set forth in the Tariff Commission report of February 1958, Korea and Bolivia are the chief sources of United States tungsten imports. Both of these countries have nationalized their tungsten mines, have manipulated their currency exchange rates and have experienced severe inflation.

The most serious form of competition is the desire of a foreign government to sell tungsten at less than production cost to maintain employment and to obtain dollar exchange—as stated on page 25 of the Tariff Commission report. The current tariff rate on tungsten concentrates is entirely inadequate to overcome this form of competition.

If you need a copy of that report for the record, I have one here.

The CHAIRMAN. You may present it to the staff and it will be on file as an exhibit to the hearing.

Mr. BRADLEY. While our domestic tungsten industry is dying out, our chief potential enemy, Russia, is expanding its tungsten production by 57 percent under the sixth 5-year plan—as stated in the Mining Journal, of February 28, 1958. I will hand you a page of the Mining Journal as an exhibit.

The CHAIRMAN. That will also be carried as an exhibit.

Mr. BRADLEY. Russia evidently realizes the extreme importance of developing new types of high temperature alloys for such applications as jet engines, atomic energy, rocket engines, and guided missiles.

In my opinion, there is a dangerous trend toward too high a dependence on overseas sources for tungsten and other strategic metals.

I, therefore, believe that it would be in the national interest for our Government to encourage the domestic production of strategic metals on a long range basis.

In the case of tungsten, the provision of funds to purchase inventories—produced in good faith under Public Law 733—would help the domestic tungsten mining industry to get back on its feet. On a long range basis, some form of protection from low cost imports is needed. As the tariff rate necessary to overcome the competition of nationalized foreign mines would be so high—triple the present rate—I suggest that this committee recommend the establishment of import quotas on all forms of tungsten imports, so that the domestic mines could be assured of supplying not less than two-thirds of the total domestic consumption of tungsten.

I believe that such an important quota would ultimately prove beneficial to the tungsten consumers, by assuring a continuing domestic source of supply.

The use of import quotas to protect domestic mines could seem to be a quick way of putting men back to work at no cost to the Government.

Furthermore, American miners working at high wages constitute a good market for automobiles and other items manufactured in the United States and the reemployment of more domestic mines would, therefore, be a great aid in overcoming the current recession.

In conclusion, I wish to thank the Members of the Senate for their efforts to obtain appropriations under Public Law 733, and I greatly appreciate the privilege of appearing before this committee.

Thank you.

The CHAIRMAN. Thank you very much.

Senator Dworshak?

Senator DWORSHAK. What is the current price situation for tungsten? What is foreign tungsten selling for when it is imported into this country?

Mr. BRADLEY. The current price is somewhere around $8 or $10 per unit before duty. The duty is roughly $7.93 per unit.

Senator DWORSHAK. It is only $15 to $17 a unit for tungsten produced abroad?

Mr. BRADLEY. Yes. The price comes up to close to $20, duty paid.

Senator DWORSHAK. You have had considerable experience in producing tungsten. What do you think is the lowest possible price at which tungsten can be produced profitably in this country?

Mr. BRADLEY. I would say in order to plan for the future and keep the mines in shape, they would need a price somewhere around $45 a unit.

Senator DWORSHAK. What is responsible for that large disparity between $20 and $45?

Mr. BRADLEY. One reason, of course, is that some foreign governments are selling their production below their cost to maintain employment and to get dollar exchange. That seems to be very unfair competition that we just cannot meet.

Senator DWORSHAK. Of course, that same thing is true in the production of all minerals in this country, is it not, to some degree?

That is, foreign competition is based upon rich deposits at low mining cost which makes it difficult for domestic mining operations in this country to compete on that basis?

Mr. BRADLEY. Yes. Of course, the principal differential in cost is the low wages in other countries. I think the situation in tungsten is more serious than some of the other metals in that the areas that produce tungsten are very low wage rate areas in addition to being nationalized.

Senator DWORSHAK. Where are most of the tungsten imports coming from now?

Mr. BRADLEY. The two chief sources in recent years have been Korea and Bolivia.

Senator DWORSHAK. Is there any coming in from Africa?

Mr. BRADLEY. Some from Africa, Spain, Portugal, Australia, Canada.

Senator DWORSHAK. How can they afford to produce Korean tungsten and ship it to this country at such low prices?

Mr. BRADLEY. I do not see how they can. They are probably losing money on it.

Senator DWORSHAK. Do you know whether there are any contracts for the acquisition by the Government of the tungsten produced in Korea?

Mr. BRADLEY. I think that contract has terminated. However, our Government does have contracts with producers in Brazil and other countries that extend into next year.

Senator DWORSHAK. At what price?

Mr. BRADLEY. I understand a price of $55 per unit.

Senator DWORSHAK. You have had some experience with antimony. Can you tell us what the current situation is, whether any primary antimony is being produced in this country?

Mr. BRADLEY. The only antimony that we know about is being produced as a byproduct from the silver-lead ores in the Sunshine mines in Idaho.

Senator DWORSHAK. There is no antimony production that is not a byproduct, then, at this time?

Mr. BRADLEY. Except for some production in Alaska.

I have not seen that in the official Bureau of Mines records, but I understand that there is some production in Alaska.

Senator DWORSHAK. Are you acquainted with the price situation on antimony today? That is, what is the lowest feasible production cost of antimony in this country and what foreign antimony is selling for now that is coming into this country?

Mr. BRADLEY. In terms of the ore, the foreign-aid antimony is coming in at between $2 and $3 per unit of contained antimony. I believe the average small domestic mine in order to produce shipping ore would need a price of around $5.

Senator DWORSHAK. So antimony is in about the same category as tungsten so far as price differentials are concerned?

Mr. BRADLEY. Yes, just about.

Senator DWORSHAK. Thank you, Mr. Chairman.

It appears that most of our minerals in this country are in the same difficulties so far as price competition is concerned.

These imports constantly come in from abroad at prices that are far below the cost of production in this country.

The CHAIRMAN. I think that is very clear.

Are there any other remarks you wish to make, Mr. Bradley?

Mr. BRADLEY. Not at this time.

The CHAIRMAN. Thank you, Mr. Bradley.

That will conclude the hearing this morning. We will go over until 2 o'clock.

(Thereupon, at 11:45 a. m., the subcommittee was recessed, to reconvene at 2 p. m. same day.)

AFTERNOON SESSION

Senator MALONE (presiding). The committee will be in order.

Mr. J. Carson Adkerson, representing the managanesse producers, will you come up, please.

STATEMENT OF J. CARSON ADKERSON, PRESIDENT, AMERICAN MANGANESE PRODUCERS ASSOCIATION

Senator MALONE. Your name is Mr. J. Carson Adkerson?

Mr. ADKERSON. That is right.

Senator MALONE. You represent the manganese producers?

Mr. ADKERSON. I represent the American Manganese Producers Association.

Senator MALONE. Will you identify yourself for the record?

Do you have a statement to make?

Mr. ADKERSON. Yes.

Senator MALONE. Please identify yourself and proceed.

Mr. ADKERSON. My name is J. Carson Adkerson. I appear as president of the American Manganese Producers Association representing

members of the industry, including myself as an individual operator in manganese.

I have a short prepared statement on the facts of the industry which I would be glad to submit to save the time of the committee, and then just summarize it in brief remarks.

Senator MALONE. Do you have extra copies?

Mr. ADKERSON. Yes.

Senator MALONE. I think that would be very well.

We will print your statement at this point in the record. You may summarize it in your own manner.

(The prepared statement is as follows:)

PREPARED STATEMENT OF J. CARSON ADKERSON, PRESIDENT, AMERICAN MANGANESE PRODUCERS ASSOCIATION

The American Manganese Producers Association, composed of domestic producers of manganese ore, was organized in 1927 for the expressed purpose "to further the production, beneficiation and use of domestic manganese bearing ores."

This statement is presented in behalf of domestic producers of manganese ores including myself as an individual operator in manganese.

Since World War I manganese has been known as the No. 1 strategic mineral. It is essential in the manufacture of steel. There is no known substitute for manganese. Without manganese there can be no steel. We use only 14 pounds of manganese in a ton of steel but without that 14 pounds our steel mills would close.

We consume approximately 2,250,000 tons of manganese ore a year and produce approximately 330,000 tons, or say 15 percent of our needs.

Manganese ore (35 percent or more Mn) imported into the United States from January through November 1957 was as follows:

	Short tons		*Short tons*
Brazil	642, 936	Cuba	154, 755
India	630, 572	Belgian Congo	128, 674
Ghana	214, 584	Other countries	237, 732
Mexico	200, 325		
Union of South Africa	199, 614	Total	2, 409, 192

Except for Cuba and Mexico, all are long sea hauls which, in an emergency, could be cut off overnight.

Manganese ore supply, consumption

[Over 35 percent manganese, short tons]

Year	United States mine shipments	General imports		Consumption of ore [2]
		Ore	Ferromanganese [1]	
1953	157, 536	3, 500, 986	252, 012	2, 195, 742
1954	205, 128	2, 165, 694	116, 088	1, 740, 648
1955	287, 255	2, 088, 427	242, 658	2, 109, 623
1956	344, 735	2, 235, 435	488, 436	2, 264, 159
1957 [3]	365, 000	3, 000, 000	400, 000	2, 350, 000

[1] In terms of ore.
[2] Ferromanganese not included.
[3] Estimated.

Source: U. S. Bureau of Mines figures.

It takes years to develop mines, build plants, and bring forth production of manganese. After an emergency starts it is too late. The only time to develop manganese production is during peacetime when time, manpower, and materials are available.

During the years 1941–45 manganese ores were shipped from mines in 27 States in the United States as follows:

Alabama	Minnesota	South Carolina
Arizona	Missouri	South Dakota
Arkansas	Montana	Tennessee
California	Nevada	Texas
Colorado	New Mexico	Utah
Georgia	North Carolina	Virginia
Idaho	Oklahoma	Washington
Massachusetts	Oregon	West Virginia
Michigan	Pennsylvania	Wyoming

Shipments from mines in some of the areas were of course small, but the record shows the widespread occurrence of domestic manganese deposits. Continued production from any of these localities may be expected as soon as conditions justify the expenditures necessary for installations to raise the manganese content of the ores.

Lest we forget, for years we leaned on Russia for the bulk of our manganese ore. In 1949 she slowed down shipments to a dribble. She simply put the squeeze on us. As far back as 1927 I warned that this happen; that Russia was using cheap manganese as a strategic and political weapon to make us dependent on her and stifle United States production. But nobody listened, even when Russia dumped manganese here in depression years. Instead, under the reciprocal trade agreements the United States cut the manganese tariff in half in 1935. In 1948 the tariff was halved again. Most United States mines were abandoned and allowed to collapse. Of more than 100 mines under development in 1930, less than a dozen were still open when war broke out. Of 131 wartime mines operating in 1944, only 10 were open in 1946. Most producers had the markets withdrawn without warning and were left holding the bag. Many lost their shirts, and have never been paid even their cash expenditures.

The result of the manganese tariff cut in 1935 was the abandonment of a number of manganese mines in the United States. Many new developments which might have gone forward during the critical years 1935 to 1940, when other nations were preparing for war, remained idle.

Beginning with World War I we have been through three war periods with consequent shortages of manganese. We barely squeezed through with our manganese supplies. The cost of obtaining overseas supplies during a war, with the cost of the Navy and Air Force in guarding the movements of ore and the loss of ships and seamen, is an entirely different figure than the price paid to the producer.

Oliver C. Ralston, chief metallurgist of the United States Bureau of Mines, testified before the Senate Interior and Insular Affairs Subcommittee on April 12, 1955, to the effect that for manganese "in wartime we can afford four times the price you normally pay" in order to get the necessary supply.

During each emergency, domestic manganese producers have been called upon to develop and produce. Each time when the emergency was over and the situation had eased, the rug was pulled from under the producers.

The tariff of 1 cent per pound on metallic manganese contained in ore, as provided in the Tariff Act of 1930, was cut 50 percent in 1935 and again 50 percent in 1948 so that the tariff now is only one-fourth of a cent per pound.

An average of 14 pounds of metallic managese is consumed for each ton of steel produced. A tariff of 1 cent per pound on metallic manganese in ore, as provided in the Tariff Act of 1930, means an added cost of 14 cents in the cost of a ton of steel; and the present tariff of one-fourth of a cent per pound on metallic manganese means an added cost of 3½ cents in the cost of a ton of steel.

So far as tariffs are concerned, the "peril point" in manganese has been reached and passed. Without the present special Government market and price there would be no new manganese developments underway in the United States today.

Under authority granted by Congress in the Defense Production Act of 1950, as amended, the General Services Administration, in order to stimulate developments in the United States, is now buying high grade manganese ores from small producers at a price of $2.30 per unit (22.4 pounds), 48 percent manganese base, in carload lots, f. o. b. any small producer's shipping point. This has resulted in increased exploration and production of maganese ores in the United States.

On account of the high cost of labor in the United States as compared with the low cost of labor in foreign manganese producing countries, without tariff

protection or a difference in price of the ore, few if any manganese mines in the United States could operate.

In evidence of labor costs and working conditions in some manganese producing countries of the world, reference is made to testimony of Harold E. Stassen, Director of Foreign Operations Administration, before the Senate Foreign Relations Committee on April 9, 1954, wherein he stated as follows:

"The raw materials come from inside the total Soviet area; that is, that vast land complex of the Soviet area has within it just about every mineral and material that there is and to bring it out of the earth they maintain huge concentration camps of slave labor under extreme conditions to bring the minerals and metals, materials, out of the earth."

It is believed that production of manganese from domestic sources could be gradually increased over a period of years to meet certainly 50 percent and possibly all the needs of the United States for many years, at prices for the ore that will not increase the cost of steel ingots as much as $1 per ton. This seems to be a small price to pay for making the United States independent of foreign sources of supply.

Mr. ADKERSON. I want to express from the members of the industry our presentation of the long and diligent efforts of this committee over the years in behalf of the mining industry, and particularly in behalf of manganese.

We are proud to say that the manganese industry has made tremendous strides since the time I first appeared before committees of Congress back in 1929 and a large part of it has come through this committee.

Manganese stands in a category all of its own. Manganese is essential in the manufacture of steel. We use an average of only 14 pounds of manganese in a ton of steel, but without that 14 pounds we would have no steel, our steel mills would close.

We now produce about 330,000 short tons of manganese ore a year. We consume about 2,250,000 tons. Therefore, we produce only 15 percent of our consumptive needs. We have a long way to go to bring the industry up to a point of producing, let us say, half of our needs.

Most of the imported ore comes from countries named in the order of importance, first, from India, then Brazil, then Ghana, and other countries. All of the countries, including the tonnages which come from each, are listed in our prepared statement, and I will not undertake to enumerate them exactly.

Senator MALONE. About 1 percent comes from India and Brazil and other countries?

Mr. ADKERSON. Out of the total of 2,409,192 tons in the year, last year we got 642,000 tons from Brazil. From India we got 630,000 tons. From Ghana we got 214,000 tons, and smaller quantities from Mexico, Union of South Africa, Cuba, Belgian Congo, and other countries.

That will emphasize that most of our imports come from far away countries with long sea hauls which, in an emergency, could be cut off overnight. We have experienced it not once, but twice, and even the third time in the Korean war, a dangerous shortage of manganese.

Each time we have been able to struggle through by the skin of our teeth at tremendous costs and always paying a penalty in the loss of ships, paying a penalty in the excessive costs, by waiting until an emergency arose before we started our developments at home.

When I first appeared before Congress in 1929 and 1930, I called attention to the fact that we were then depending upon Russia for a large part of our consumptive needs of manganese. I warned that

Russia was shipping us manganese, dumping manganese if you please, during the depression, not for the purpose of trade but for the purpose of preventing the development of manganese deposits in the United States.

I predicted that the time would come when we needed manganese most that Russia would cut us off; that we could not depend upon Russia for our manganese. Russia has shipped us no manganese now since 1950. They cut us off when we started stockpiling prior to the Korean war.

That serves to illustrate the dangers that we face if we depend upon overseas sources such as Russia, India, Africa, or even Brazil for our needs in manganese.

It is impossible to produce manganese in the United States in competition with foreign ores on account of the difference in wage scales in the United States and foreign countries.

Earlier it has been said that we had very little manganese in the United States. That statement has been exploded over and over again. It is now recognized that we have enough indicated reserves to last from 100 to 500 years. That includes, of course, the low-grade ores.

Again we were challenged with the statement that we had no processes to beneficiate our low-grade ores. That has now been accomplished and proven over and over again. We now have processes in operation producing the highest grade product from our low-grade ores. The only thing we need is a continuous market, a market long enough in advance to assure the producers that they will get their money back when the developments are made to increase the production of manganese in the United States.

It is not a problem of ore reserves, it is not a problem of processes; it is a problem solely of difference in cost of production between domestic and foreign ores and a market assured long enough in advance to enable domestic producers to get their investments back.

Fortunately, during the last several years the industry has enjoyed a special buying program under the GSA, which has aided the industry in increasing its production. That has come about through two avenues. One is the purchase of low-grade ore for low-grade stockpiles. Those stockpiles are located in Wenden, Ariz.; Deming, N. Mex.; and Butte and Philipsburg, Mont. No low-grade purchase depots were established east of the Mississippi River.

The other is a purchase program known as the high-grade ore program, inaugurated by the GSA, where they would buy up to 10,000 tons a year from any one domestic producer of a specified standard grade ore. That requires mills to be installed for processing. That program is now going ahead. The low-grade stockpile at Wenden, Ariz., has used up its 6 million units and is now closed.

Deming, N. Mex., has used its 6 million units and is now closed.

The stockpile at Philipsburg is about to be closed.

The high-grade buying program has been extended from time to time for periods of about 2 years each and is scheduled to run until a total of 28 million units of manganese has been delivered or until January 1, 1961.

At the present rate of production the 28 million units will be used up and the program ended sometime during the year 1959. We are now producing at the rate of about 500,000 units a month, so that we can estimate that the program will be ended in 1959.

We are now faced with a termination of the buying program for the high grade as well as the low grade. We earnestly ask this committee to consider the extension of the high-grade program. This is outlined in a bill recently introduced by Senator Martin of Iowa, known as S. 3537. This bill provides for the 28 million units now authorized to be increased to 60 million units, and the time limit extended from January 1, 1961, to June 30, 1963.

We recommend that S. 3537 be passed.

There is also a bill before this committee which was introduced by Senator Murray and Senator Mansfield known as S. 3496. That bill provides for the upgrading of the low-grade stockpile at Butte and Philipsburg, Mont., through the medium of a beneficiation plant now constructed and idle. The mill is owned by the Government, and located at Butte, Mont. That mill is prepared to beneficiate that ore. It now stands idle.

There is no reason why these low-grade ores should not be beneficiated at a time when we have an excess surplus of labor and materials and supplies. The question has been raised about the cost of the manganese tariff in the cost of steel. I heard a statement over the television the other night, I don't recall who the speaker was, but he was one of the official persons under the trade program. He stated that the present cost of steel was due largely to the high cost of the manganese tariff in steel.

It is shown in our prepared statement, and I will not go into detail, but I do want to emphasize that the total tariff on manganese under the 1930 Tariff Act was 1 cent per pound of metallic manganese contained in the ore, which means that, if we use 14 pounds of manganese per ton of steel, the total cost to the cost of a ton of steel under the 1930 Tariff Act is 14 cents.

Now, the tariff has been cut 50 percent under the trade agreement with Brazil in 1935. It was cut again 50 percent under the trade-agreement program in 1948, so that the tariff has been cut 50 percent twice. The present tariff is one-quarter cent per pound of metallic manganese contained in manganese ore, which means 3½ cents in the cost of a ton of steel.

Again I want to say that I appreciate what this committee is doing. I would like the privilege of submitting a supplemental statement with recommendations on the long-range program when these hearings are over.

There might be something else which should be included, and I would like an opportunity to submit a supplemental recommendation as long as the record is kept open.

That completes my statement, Mr. Chairman, and I thank you.

Senator MALONE. Mr. Adkerson, what you say is very interesting. When you say there are 14 pounds of manganese in a ton of steel, I presume you mean an average?

Mr. ADKERSON. That is an average; yes.

Senator MALONE. What is the variation in just ordinary steel and the high grade?

Mr. ADKERSON. They will use as much, sometimes, as 14 percent to a ton of steel. In railroad switches and frogs, power-shovel dipper points, special steels will contain increasing quantities of manganese, but, when we talk about 14 pounds per ton of steel, that means the average per ton of all steel produced in the United States.

Senator MALONE. Then, for the highest grade steel, it would be around 280 pounds to the ton?

Mr. ADKERSON. Yes, sir; it could be anything where the special steels are concerned, like the manganese-alloy steels.

Senator MALONE. But the price of those steels is also very much higher than the ordinary steel?

Mr. ADKERSON. That is correct.

Senator MALONE. So that, as a percentage of the cost of the steel, the rise in cost due to the manganese included in the steel then would be rather uniform? That is to say, the percentage of the cost of the manganese in this ton of steel due to that higher grade of the steel would be about the same percentage of cost per ton?

Mr. ADKERSON. That is correct.

Senator MALONE. Now, we understand that inflation has taken over, as it has been doing for 24 years without any letup or very great variation, 3 or 4 percent a year or 5 percent, but, taking present conditions, at what price could you produce manganese in this country per unit?

Mr. ADKERSON. We are now producing manganese ore at the price of $2.30 per unit, based on 48-percent ore. I checked the foreign price before I left the office a few minutes ago. It is $1.40 a unit for the same grade at Atlantic seaports. Add 5.6 to that for the tariff and that would be the price of foreign ore at Atlantic seaports.

Let us say $1.45 a unit is the present price of foreign ores, based on 48 percent, and $2.30 is the Government premium tops for domestic ore.

Senator MALONE. What do you mean by Government premium tops?

Mr. ADKERSON. That is the highest price that they are paying for the 48 percent ore under the premium price schedule which is now in effect and under which the producers are shipping.

Senator MALONE. That is their stockpile program?

Mr. ADKERSON. Yes.

Senator MALONE. I thought that was somewhere around $1.96, but it varies, does it?

Mr. ADKERSON. It varies with the grade of the ore. For instance, very few get above $2 a unit, but the top price is $2.30 minus penalties. The top price of the foreign ore as it is today is $1.456.

Senator MALONE. If it has 48 percent manganese, are you penalized for certain units?

Mr. ADKERSON. Yes; if it has, say, about 10 percent silica, you are penalized on the silica. If it has above a certain percent of phosphorus, you are penalized on that. They allow 0.3 phosphorus.

Senator MALONE. Above that, you are penalized?

Mr. ADKERSON. Above that, it is rejected. Above 0.12, you are penalized on phosphorus, so that the penalities bring it down to where it may run a little below $2.

Senator MALONE. You say that it would require about $2.30 a unit for domestic production to compete with the foreign price?

Mr. ADKERSON It is doing that now. In other words, we are getting increased production right along at $2.30, as compared with the foreign price of $1.46.

Senator MALONE. That is the Government fixed price?

Mr. ADKERSON. That is correct.

Senator MALONE. If those contracts run out, you fall back on the world price?

Mr. ADKERSON. Yes, which would mean $1.46.

Senator MALONE. Is that $1.46 price a rockbottom price where they can make money on the imports, or do they sell it at that price because the market will take it at that price? Putting it this way, suppose you were suddenly out of Government contracts, but you found you could produce it for $1.40. Do you suppose the foreign production would drop their price? What is the record in regard to that?

Mr. ADKERSON. The record is that about 18 months ago, it dropped to about 75 cents a unit.

Senator MALONE. They still made money?

Mr. ADKERSON. They still continued to ship.

Senator MALONE. It could be that it is a good deal like tungsten or many other minerals. They take what the traffic will bear when the domestic production is not in competition.

Mr. ADKERSON. One of the best illustrations on that is Russia. When the tariff was under consideration in 1930, we recommended a higher tariff than 1 cent a pound. We also recommended a strengthening of the Antidumping Act.

Senator MALONE. That would be 22½ cents a unit?

Mr. ADKERSON. Yes. Now, they gave us that 1 cent a pound on metallic manganese contained in ore which some thought was rather good. In 1930, when we started to produce, we had about 100 mines under development, some of them getting into production. When we started to be a real threat, Russia came right over that tariff wall. It meant nothing. You could have had 2 or 3 cents a pound tariff. Russia offered to sell ore in the United States at any price that any domestic producer would quote, and she did. They were determined to close the mines in the United States, and did.

I came to Washington and went before the Finance Committee and Ways and Means Committee, and asked for an embargo to try to stop it.

Senator MALONE. Are you familiar with the memorandum that Harry Dexter White furnished the Secretary of the Treasury on March 7, 1944, suggesting that the United States advance $5 billion to Russia for which we would purchase petroleum, manganese, tungsten, zinc, lead, chrome, mercury, and other strategic materials?

Mr. ADKERSON. I am familiar with it, and I furthermore want to thank the Acting Chairman of this committee now, Senator Malone, for bringing that to the light of day and exposing what was being done.

Senator MALONE. When we prepared this report, Senate Report 1627, 83d Congress, we sent an investigator to Princeton University, and at that time in 1944, Mr. White said in a table that in petroleum on the basis of 1938 use, we had 16 years' supply; on the basis of our current consumption as of 1943, we had 13 years supply; manganese, we had 9 years supply by 1938 consumption, and by 1943 consumption 3 years supply; tungsten, 23 years supply for 1943.

These are reserves that we had in this country.

It goes on to estimate zinc, 17 years' supply on 1938 use, and by the 1943 rate 8 years' supply; lead on the same basis, 7 years' supply and 6 years' supply; chrome, no record on the 1938 use and less than 1 year's

supply of the 1943 use; mercury, 2 years' supply at 1938 rate and 1943 rate, 2 years' supply. Of course, every year we had more reserves.

I think it is well to make this letter a part of the record at this time. It appears at page 370, 371, and 372 of Senate Report 1627 of the 83d Congress.

Then the Secretary of the Treasury sent the same letter and the same estimate to the President, and that was the basis of doing away with the effect of the Buy-American Act.

In other words, the President then said we must save our supplies and import all of these other materials.

I will not put that letter into the record, but it appears following Mr. White's letter in the report, and Mr. White's announcement follows that recommendation.

What about the developments in an industry like manganese or any mineral, as a matter of fact, in mining? Can private money be invested without a long-range principle laid down by Congress of protection or price?

Mr. ADKERSON. I have done it and others have done it, but I would never do it again. We have lost by it.

Senator MALONE. Any experienced mining man would not invest money under these conditions?

Mr. ADKERSON. I have done it and lost, but I have sworn I will never do it again.

Senator MALONE. What is the situation at this time under the 1934 Trade Agreements Act? Is that not exactly what we have? The constitutional responsibility for the Congress to regulate trade in the national economy through the levying of duties or excise tax was transferred to the President, and Mr. Dulles testified that if the President thought that his foreign policy would be furthered by the sacrifice of any industry, he could do that.

It is what would happen, is it?

Mr. ADKERSON. That is correct.

Senator MALONE. Can you invest money with that authority in one man?

Mr. ADKERSON. No.

Senator MALONE. You could not invest it even if Congress just set a price for a short term of years, could you?

Mr. ADKERSON. No, they could change it.

Senator MALONE. We had an experience in tungsten. The Malone-Aspinall Act passed in 1953 and extended in 1956 is still good to 1959, but we sent the appropriations to the Senate and four times to the House, and they refused it, so that there is no money and the tungsten mines are down, are they?

Mr. ADKERSON. That is correct.

Senator MALONE. So that special legislation that runs out must be renewed every year and that is no basis upon which to invest money, is it?

Mr. ADKERSON. That is correct.

Senator MALONE. What would you suggest in the matter of a principle by Congress?

Mr. ADKERSON. It's a long-range policy where you are assured of a market, a certain percentage of a market for a certain length of time. It seems that that is the answer to it.

To explore the whole thing, it cannot be done just sitting here, but you have to be assured of a market over a long period of time before you justify developments in the industry.

Senator MALONE. Then what you would have to have would be a 5- to 10-year period with a guaranteed unit price, flexible subject to inflation, or a duty as set down in article I, section 8 of the Constitution, that made up that difference in cost of production.

Mr. ADKERSON. A flexible tariff would probably be one of the answers to go with quotas. It would be several moves that would have to be worked out to assure a continuous market.

Senator MALONE. Suppose Congress just sits still this year and does not extend the 1934 Trade Agreements Act, which expires June 30. Do you understand what happens?

Mr. ADKERSON. Yes, I understand it expires.

Senator MALONE. It expires and then after that, no further trade agreements could be made, could they, by either the Secretary of State or the league of 37 nations, members of GATT.

Mr. ADKERSON. That is what I understand. None would be made and the others would expire on 6 months notice.

Senator MALONE. Then if the President serves 2 months' notice on the nations party to the multilateral agreements, according to the law, those agreements are nullified and they revert to the Tariff Commission, do they not?

Mr. ADKERSON. Yes, that is what I understand.

Senator MALONE. On 6 months' notice on the bilateral trade agreements made by the Secretary of State, those trade agreements expire and revert to the Tariff Commission, is that true?

Mr. ADKERSON. That is what I understand.

Senator MALONE. Now, if that were a fact, and it is according to a letter I have from the Tariff Commission, then it reverts to the Tariff Commission, the tariff being flexible and adjusted, giving them 30 percent leeway up or down to make the difference specifically the cost of production here of a like article or that article and the chief competitive foreign nation; is that true?

Mr. ADKERSON. That is right.

Senator MALONE. And the tariffs to which it reverts are the statutory tariffs, meaning the tariffs that were in force when the 1934 trade agreements acts were passed, is that true?

Mr. ADKERSON. That is correct.

Senator MALONE. Do you think that would do the job?

Mr. ADKERSON. I think it would help.

Senator MALONE. What do you mean by help?

Mr. ADKERSON. Well, there are so many different loopholes that can come through.

For instance, if I may go back just a moment to two points that I want to emphasize, the first is that when this reciprocal trade agreements program was first outlined in 1934 and 1935, I appeared against it on the grounds that it would cut the tariff on items essential to national defense, such as manganese. Now, all the friends on the committee gave us assurances that proper consideration would be given and that items such as manganese would not be cut, even down to a statement from the President to this effect: that items necessary

in our national defense will not be canceled away for a passing advantage.

Senator MALONE. They were cut, were they not?

Mr. ADKERSON. They were, and I appeared before the committee each time since.

Senator MALONE. Let us get back to this thing.

No more trade agreements could be made after June 30 if the Senate and House did not extend the Trade Agreements Act?

Mr. ADKERSON. That is correct.

Senator MALONE. If it reverts automatically after certain definite notice to the countries with which these trade agreements are made, and reverts to the Tariff Commission on the statutory rate, meaning the rate at the time you first appeared before the committee, and then the adjustment up or down on thirty percent on the basis of fair and reasonable competition, you would have no complaint, would you?

Mr. ADKERSON. That question came up the other day before the reciprocal trade agreements extension hearings.

That would only mean at the present time 1 cent tariff plus 50 percent, making a total of a cent and a half.

Senator MALONE. What was the tariff when you first appeared?

Mr. ADKERSON. We got 1 cent a pound. One cent a pound today is not much.

Senator MALONE. This was the early thirties.

Mr. ADKERSON. Yes; 1930.

Senator MALONE. How long do you think it would take Congress to allow the Tariff Commission more leeway if it needed it?

Mr. ADKERSON. That is what they should have. Even the tariff of 1 cent a pound will not keep the others out.

Senator MALONE. Suppose that the Tariff Commission was given the leeway that would be necessary? Inflation has taken care of a lot of it. Suppose we let the Tariff Commission fix that duty, whatever it might be, between the cost of production here and the cost of production of that article or a like article in a chief competitor foreign country, and that is exactly what the 1914 law says. That would do the work; would it?

Mr. ADKERSON. It would help as long as there is a flexible tariff to make up the difference, not limited to the 1930 act, that would help. Tungsten is in the same position.

Senator MALONE. That would do the work?

Mr. ADKERSON. I don't say it would be the final answer because we have so often gone up against Russia. If I may say this. Russia can at any time, if she is allowed to, dump products in here. This she has done repeatedly. We are victims of it. Russia has no cost of production. You well understand that. She owns everything.

Senator MALONE. Then if you turned the Tariff Commission loose, you could put on a tariff for the full price.

Mr. ADKERSON. That is right; but there must be provisions to take care of the Communist countries where the industries are state-owned and have no cost of production based on our analysis of a cost of production.

Russia dumped products in the United States. This happened first in manganese in 1930. We explored every avenue of relief. The same thing happened in 17 national industries.

There is no solution except to find a way of preventing the products from coming in. They sold wheat short on our exchange and bought back the same wheat and delivered the wheat here and made money out of forcing our prices down. It appears they are about to do the same thing now. It is claimed they are now dumping aluminum in Europe.

Senator MALONE. Do we not have a philosophy now that we encourage foreign countries to do that?

What I am talking about is going back to the policy that we had in 1789 when we fixed the first protective tariff to 1934, and giving the Tariff Commission the right to compensate for manipulation in the value of money, for dumping and for any other abuse of a market. Could it not be handled that way?

Mr. ADKERSON. Yes; and what you were saying there and what I would like to emphasize is that in any tariff that is passed, there must be flexibility to take care of dumping such as Russia would resort to if any loopholes are left open.

Senator MALONE. Do you not know that the 1930 tariff was flexible within limits of 50 percent, which could be easily multiplied so that on their own motion at the request of a congressional committee, the President or a consumer or seller, they could take it up and readjust the tariff.

You knew that.

Mr. ADKERSON. We knew that and tried that. We tried everything available to us over a period of about 2 years.

Senator MALONE. What years?

Mr. ADKERSON. The 1930 and 1931 immediately after the tariff was passed.

Senator MALONE. Did they adjust it?

Mr. ADKERSON. No; they threw us right out. We got nothing. Everybody in the industry went broke.

I am saying let us not get back to that situation where Russia can resort to any means at her command, which she has the power and strength and money to do, to wreck us. Protect ourselves first.

Senator MALONE. I am trying to say that if the Tariff Commission has the power, which it has under the 1930 act, and we do not change our philosophy but go back to the Constitution of the United States, and they can take into consideration the dumping, the manipulation of money in terms of the dollar for trade advantage, would we not be getting some place?

Mr. ADKERSON. Yes; and it should be done.

Senator MALONE. What I am pointing out is that all we have to do is for Congress to sit still this time and revert to the statutory rates as of that period, with the suggestion and a simple amendment to the Tariff Act to allow the Tariff Act to do that. Do you not think so?

Mr. ADKERSON. I hope so.

In the Tariff Act of 1930, we were given assurances that we had the right to raise it 50 percent. We had the right of the Antidumping Act.

We applied under all of them and got nowhere. We outlined what Russia was doing by dumping, not only in manganese but in 17 different national industries. We experienced nothing except defeat from all sides.

Senator MALONE. Thank you very much, Mr. Adkerson.

Mr. ADKERSON. Thank you, Mr. Chairman.

Senator MALONE. Mr. James E. Mack, Rolled Zinc Emergency Tariff

Is Mr. Mack present?

If not, we will take Mr. Thomas Kennedy, vice president of the United Mine Workers of America.

STATEMENT OF THOMAS KENNEDY, VICE PRESIDENT, UNITED MINE WORKERS OF AMERICA

Senator MALONE. Mr. Kennedy, we are glad to see you. Do you have a prepared statement?

Mr. KENNEDY. No; I do not.

Senator MALONE. Would you like to make an informal statement for the record?

Mr. KENNEDY. I wish to do so, yes.

Senator MALONE. Will you identify yourself for the record and proceed?

Mr. KENNEDY. My name is Thomas Kennedy, vice president of the United Mine Workers of America.

Speaking for the coal industry and getting away from the hard-rock industry, as we put it, the coal industry is in bad shape at the moment and has been for the past several months. Last year we produced about close to 500 million tons of coal. There were about 50 million tons shipped abroad. That includes anthracite, which shipped about 2½ million tons. We had the elements of a good opening market in Europe. We expected to eventually export about 70 million tons.

Well, we ran into some situations in France and Belgium and other countries where the French Government made a deal with Russia and they have taken about 800,000 tons of anthracite in storage over there, which the French Government will not permit to be moved. It is in Holland and it is for distribution in France, but they will not permit that coal to be distributed, notwithstanding that it is over there, for the reason that they are getting their coal from Russia. Whether it is on a barter basis or whether they are using our funds, I do not know. It is pretty hard to determine that fact.

The situation in England is that they are taking some coal. The Polish coal industry, which of course now includes the Silesian coalfields formerly operated by Germany before the peace settlement, are able to export between 20 million and 25 million tons. We find that they are shipping most of it to France, to Belgium, and to some of the low countries, and also into the scandinavian countries.

Senator MALONE. This is Poland?

Mr. KENNEDY. Yes. Recently we understand that our own Government is going to help to finance Poland so that we might have keener competition so far as American coals are concerned.

I found when I was in the Scandinavian countries during the war that Poland was trading her coal for iron ore from Sweden and that iron ore was being used to make bullets and war materials to shoot our soldiers in Korea.

We have another situation with respect to our exports. We went into the shipping business with some of the railroads and some of

the coal producers not too long ago. The shipping rates were then about $15 per ton. We went in for the purpose of lowering those rates and all of it was shipped in boats under other nations other than our own. That rate has been reduced now to less than $5, so that on a competitive basis we can send our coal over there, in connection with any coal produced in Europe.

We produce in the United States on a national average 11 tons per day per man. That is bituminous.

In England they produce 1.23 tons per day.

In France and Belgium and other countries in Europe, they produce about a ton a day per man.

Senator MALONE. What is the difference in the wages?

Mr. KENNEDY. Well, the highest wages are paid in England in the mining industry. They would average, I would say, about $30 a week as against our rate over here of $24 a day.

Senator MALONE. They get about same per week as you get per day?

Mr. KENNEDY. Pretty near the same.

Senator MALONE. Does that tend to more nearly equalize the cost of production?

Mr. KENNEDY. Their costs are way above ours. In other words, the greater productivity in the United States has really brought about hardly any increase in the cost of our coal because of the increased productivity. Bituminous coal in England today at the mine is selling for about $12 a ton, whereas in the United States it's about $5.25.

Senator MALONE. With the $5 freight, you can deliver it to a pier over there for about $10?

Mr. KENNEDY. We can compete, yes; that is our problem in Europe.

Senator MALONE. What does it cost Poland?

Can they compete with you laid down in England and France?

Mr. KENNEDY. It is very hard to get costs out of any of the satellite countries, including Russia or Poland or Czechoslovakia or any of those countries. It is hard to get prices.

We figure that their productivity is not much greater than that in Europe and that the costs are relatively the same. Of course, they subsidize; for instance, a number of years ago we had a bill put through Congress. Congressman Boland from Lackawanna County fathered the bill. We put a tax of $3 a ton on imported coal. By the time the State Department got through with it, they had only allowed it against Russia on the favored nation clauses. In other words, the tax did not apply against any country except Russia.

Senator MALONE. That is under the most favored nations clause where any treaty made with one nation is available to all?

Mr. KENNEDY. It was shipped into Boston, mostly anthracite for trade-balance purposes, so that, speaking of reciprocal trade, I don't know. With all of these subsidies in effect and these other countries, how are you ever going to get around it.

Tariffs, of course, are necessary, but we believe that perhaps the quota system is part of the answer.

Then we have a situation on the eastern seaboard with respect to the dumping of this residual or waste oil on the eastern coast, mostly from Venezuela. This is a memorandum I sent to Governor Leader here recently with respect to this Venezuelan oil, and I will be glad to put it in the record.

Senator MALONE. It may be accepted for the record at this point. (Letter referred to follows:)

UNITED MINE WORKERS OF AMERICA,
Washington, D. C., March 19, 1958.

Hon. GEORGE M. LEADER,
Governor, Commonwealth of Pennsylvania,
Harrisburg, Pa.

DEAR GOVERNOR: Pursuant to our recent telephone conversation, I enclose herewith resolutions adopted by the international executive board of the United Mine Workers of America while in session here in Washington, D. C., last week.

Supplementing these resolutions, the following is a rundown of the facts with regard to the dumping of residual oil on the eastern seaboard, all of which comes from Venezuela:

There were 161,846,000 barrels of residual (waste) oil imported in 1956 which is equivalent to 38,843,000 tons of coal (mostly bituminous). Preliminary figures for 1957 indicate that 162,605,300 barrels of residual oil were imported last year which is equivalent to 39,025,300 tons of coal. Despite requests of the Government for a lowering of importation, you will note that instead of imports of residual oil being lowered, they were increased in 1957. From January 1 to March 7, 1958, there were 37,872,300 barrels of residual (waste) oil imported. During the same period of 1957, 37,677,000 barrels of residual (waste) oil were imported, which was a steady increase this year as compared against the imports of last year. This oil is selling for approximately 6 cents a gallon now on the east coast, whereas No. 2 house fuel oil is selling for almost 15 cents per gallon.

As a result of this reckless dumping of oil, coal cannot compete and I doubt that the matter can be corrected by any tax. It is for this reason that we have suggested a quota system so as to prevent this dumping of waste oil which is contrary to the public policy of the United States and disastrous to the coal economy. The coal displaced by dumping of oil would amount to approximately the loss of 1 month's work in the mining industry which, of course, represents a very sizable amount of wages and purchasing power that has been taken away from potential wage earners in the mining industry.

With respect to the other situation in Europe on exports, we find that the money we are sending to European countries is being used to buy Polish and Russian coal, although some coal is bought from Russia on a barter system. I think if this matter were looked into very carefully, you would find that a lot of this Polish and Russian coal is being subsidized by the Polish and Russian Governments. Of course, such procedure is contrary to the reciprocal trade policy and is indicative that reciprocal trade has ceased to be reciprocal trade, in our opinion. As indicated in one of the enclosed resolutions, you will note that approximately 100,000 tons of anthracite coal from Pennsylvania has been held up for distribution by the French Government and they probably will try to escape from the reciprocal trade obligations by contending that a separate authority handles coal purchases.

I hope this information will prove of interest and value if you care to present testimony at the meetings scheduled to be held on March 24 and 25 here in Washington.

With kind regards, I am

Very truly yours,

THOMAS KENNEDY, *Vice President.*

Mr. KENNEDY. There were 161,000,846 barrels of this waste oil imported in 1956, which is equivalent to 38,843,000 tons of coal, mostly bituminous. Preliminary figures for 1957 indicate that 162,650,300 barrels of residual oil were imported last year, which is equivalent to 39,250,300 tons of coal.

In other words, we were led to believe that under this so-called oil arrangement the importations would be reduced. Yet they have been increased very substantially.

For the first 4 weeks of this year, it shows a further substantial increase. Who benefits by it, I don't know. I don't know whether it was the dictatorship down there that we supported for a number of years or the Creole Petroleum Oil Co. which makes fabulous earnings. They are about the only people who benefit by it, and we suffer.

Senator MALONE. What country is this?

Mr. KENNEDY. Venezuela. On that matter, Senator, we have suggested to the President's Committee and to Congress at the last session that they fix a quota system on it and, by the way, this was the first reciprocal trade agreement that was made by Secretary Hull when it was first passed.

Senator MALONE. That was on the residual oil?

Mr. KENNEDY. Yes.

Senator MALONE. Speaking of your Tariff Commission being your regulator as an agent of Congress, which would occur if we do not extend the 1934 Trade Agreements Act, I have had a bill in the Senate for some time, last on January 7, 1957, which gives the Tariff Commission a little more latitude, but in one section, section H, page 7, it provides:

> The Commission in the manner provided under subdivisions (d) and (f) in this section may (a) impose quantitative limits on the importation of metals and materials in such amounts and for such period as it finds necessary in order to effectuate the purpose of this act.

This is only on critical minerals and metals and materials, but a like bill, Senate bill 28, covers all imports.

Mr. KENNEDY. I remember the bill.

Senator MALONE. Would that not cover your problem?

Mr. KENNEDY. I think it would go a great way in helping us.

Senator MALONE. In other words, it would allow the Tariff Commission to be the regulator and, if they practiced dumping, practiced manipulation of their currency in terms of a dollar, let them apply the remedy.

Mr. KENNEDY. Would there be any appeal or would it go beyond the Tariff Commission under your proposed bill?

Senator MALONE. From the Tariff Commission, there is also Congress. All the congressional committee would have to do is call them in.

Mr. KENNEDY. We would have no objection to that, but if somebody else has a right to reverse the Tariff Commission, we are opposed to it.

Senator MALONE. That, of course, is what happens under the 1954 Trade Agreements Act. From Congress there was transferred the constitional responsibility of Congress to regulate foreign trade and to adjust the duties. It was sent to the President and then by him to Geneva, all under this 1934 Trade Agreements Act, so testified by Mr. Dulles. So that the Congress has no recourse except to take up a product just of its own motion in a committee. Anything they do is not subject to appeal to the Congress now.

It is bypassed, which of course, in my opinion, in the 12 years that I have been here, I think it is an outrage that the legislative authority of the Constitution is transferred to the Executive, because the Constitution of the United States clearly and explicitly separates the regulation of foreign trade and the national economy and adjustment of duties and excises from the foreign policy. It puts one under the executive department and the other under the legislative department, but the 1934 Trade Agreements Act tied them together.

Mr. KENNEDY. I see.

Senator MALONE. Now, if we do not pass anything, they become separated on June 30, and then, as I have already outlined for the record,

upon certain notice all of these trade agreements are canceled and they revert to the Tariff Commission.

That, in your opinion, might do the job?

Mr. KENNEDY. I think so. I think it would go a great way to do the job.

I get to a lot of meetings in Europe, especially in the countries that are mining countries, and I belong to the executive board of the ICFTU, where we have them from all the free countries, and this proposed organization that they are setting up in Europe on trade policies between the various governments is part of the Schuman plan, which affects coal and steel.

Now they are going to broaden out and there will be no tariffs as between those countries, but an outsider is going to be hit over the head with a hammer. That is what is going to happen.

Senator MALONE. That will just about finish the job on Uncle Sam.

Mr. KENNEDY. It will, positively.

The CHAIRMAN. Have you ever had any experience with any of these industries in trading funds agreements? Do you not find that it is their practice to evade them?

Mr. KENNEDY. That is my experience and, if a government is obligated to do a certain thing, they will set up a purchasing commission or an organization to do the opposite. That is what they are doing.

The CHAIRMAN. You are familiar with the fact that in the General Agreements on Tariffs and Trade, that organization set up by our own State Department located in Geneva where now 36 foreign nations are members with us as 1 member each with 1 vote, that according to the rules and regulations of the GATT the foreign nations do not have to live up to their agreements as long as they can prove they are short on dollar balance payments.

Mr. KENNEDY. That is correct.

The CHAIRMAN. Then they are not living up to it, are they?

Mr. KENNEDY. Certainly not.

The CHAIRMAN. In other words, every country in the world has its quotas, tariffs, exchange permits, meaning you have to have a permit to change your money to get the stuff into their country, or import permits or all of them, and we are the only free-trade nation in the world today, are we not?

Mr. KENNEDY. That is right.

The CHAIRMAN. Perhaps we should let the Trade Agreements Act expire and give the Tariff Commission enough power to cope with circumvention on the part of unscrupulous nations.

Mr. KENNEDY. I am for that.

The CHAIRMAN. I want you to study this bill. It is not very much different from the 1930 act that gave the Tariff Commission power to adjust tariffs.

It was called the Smoot-Hawley Tariff Act, but the emphasis was placed on high tariff and not on the fact that they could adjust it by holding hearings on a particular product.

Mr. KENNEDY. In addition to these matters affecting exports and imports, I don't know how it would apply to the metals industry, Senator, but I think there is a resolution pending in the Senate that was introduced by Senator Myers, who has since died, calling for the setting up of a fuel policy on the part of the Federal Government.

Now, I don't know how that would affect the metals industry, but I think it could be worked out as affecting the fuel industry.

I don't know whether that resolution is still pending. It was kept alive year after year, but nothing has ever been done.

The CHAIRMAN. Senator Myers has been gone quite a while.

Mr. KENNEDY. I think Senator O'Mahoney kept it alive for a while.

The CHAIRMAN. It could be examined. Fuels can be a little different than metals.

Mr. KENNEDY. That is all I have at the moment, Senator.

The CHAIRMAN. You may submit a further statement if you wish.

Mr. KENNEDY. Thank you.

The CHAIRMAN. Thank you for your testimony today.

Mrs. Dorothy Priester is here and Mr. Pilrim, who, I understand, have about the same problems.

Will you two come forward, please.

Mrs. Priester, do you have a statement that you would like to make or submit for the record?

Mrs. PRIESTER. Yes, Mr. Chairman, I do.

STATEMENT OF ALMA DOROTHY PRIESTER, CHAIRMAN, AMERICAN ANTIMONY COMMITTEE, HOLLYWOOD, CALIF.

Mrs. PRIESTER. Mr. Chairman and members of the committee, I am Alma Dorothy Priester, chairman of the American Antimony Committee, at 6853 Camrose Drive, Hollywood, Calif.

I am a technical adviser on antimony to the Western Governors' Mining Council.

I am president of the Rosal Mining & Land Corp. of Lovelock, Nev.

May I express my appreciation for the opportunity of appearing before this committee, and thank you for your continued interest in our mining problems.

I particularly thank the senior Senator of Nevada, Senator Malone; the junior Senator of Nevada, Senator Bible; and the senior Senator of Wyoming, Senator O'Mahoney.

During many years of observation my conclusion is antimony might well be termed the "orphan ore," due to its unfortunate position of a long period of economically nonfeasible operation.

Except during a few intermittent periods its history has been that of rising costs of operation without compensatory price increases—in fact, a weak spot in our domestic industrial and national-defense needs if imports were cut off for some time.

In 1939, at the insistence of Army officers from CCC camps, Nevada, I hesitatingly took the responsibility of accepting their powers of attorney for interests in antimony. Claims were located, realizing the value of this ore in World War I. These powers of attorney I still hold, while the officers have served their country all over the world.

May this be emphasized, it has been my opportunity of continuously keeping in contact with the antimony situation and knowing many of the miners.

A number of years ago I made an antimony survey: Mr. Paul K. Gardner, owner and publisher of the Lovelock Review-Miner, believing these findings of such national concern, wired Hon. James Graves Scrugham, United States Senator, Nevada, that he believed the Gov-

ernment should give assistance with at least portable equipment for further development of these properties. Because of the unfavorable markets and imports, no interest was created.

One must be cognizant of certain pertinent factors of the unfortunate history, culminating into long years of heartaches endured by the antimony miner.

Entering the field almost 19 years ago, "fireside chats" often high in the mountains with a few of the remaining old antimony miners now over the Great Divide, gave me an enlightening insight, lost to many.

Properties of these old antimony miners were not operated long enough to be placed on Government records of production. A few sacks here and a few sacks there.

Many of these claims abandoned years ago are now idle and unknown today.

How often did the old gold prospector tell of roaming hills, narrating that he had seen many antimony formations when searching for gold.

I emphatically make this statement: I do not believe an engineer or group could avail themselves of the data on the quantity of this ore today without a far greater exploratory program than merely contacting the present-day owners. In the past, most all ore discoveries were made because of outcrop mineralization. If the miners were allowed to operate at living wage, other ores would be discovered, thus greatly adding to our national economy.

In Pershing County, Nev., I have organized one of the largest groups of antimony properties in the United States. I was informed by an engineer who, in his lifetime's work, approved only 20 mining properties, all of which were successful, that following his examination of deposits throughout Nevada, he believed that this State alone could supply all domestic needs.

Although it is thought by some we do not have rich ore, yet high grades have been shipped from the West, especially from Pershing County, Nev., considered the richest area for antimony in the United States.

In directing activities throughout the United States and Alaska for 17 months in continuance of my objective, that of making contact with and organizing mineowners to place antimony on the long-range national minerals program, we contacted Federal and State bureaus of mines, governors, secretaries of states, requesting names of their mining committees, then writing to each member of the various committees, also to the 126 and mining associations.

Names of antimony property owners were received from most responsible men in the mining industry, thus using every channel available for mailing thousands of letters.

The Government states we do not need increasing supplies of antimony, that it can be used over and over.

Among many replies from Washington to numerous letters requesting favorable legislation, one fell into the hands of a very fine scientist. He refuted this statement, sending copy of reply for our use.

True, antimonial lead can be used over and over in batteries and certain other uses, but for defense purposes, such as fire retardants for the Army and Navy, ammunition, et cetera, we must have the primary ore.

Two new potential requirements are under development, and could require large tonnages of primary antimony—electroplating as a partial substitute for nickel, semiconductor compounds for certain uses more suitable than germanium and silicon.

Other uses are bearings, type metal, britannia metal, pewter, cable sheathing, hard lead, vulcanizing rubber, pigments, mordants, and enamels.

In digressing momentarily to a point in ancient times, quoting the Encyclopaedia Britannica and referring to the Holy Scriptures, Jezebel used stibium for darkening the eyes.

The Department of the Interior reports requirements for consumption as decreasing, whereas in 1956 we had the greatest consumption of antimony of any year. The consumption has dropped somewhat in 1957 because of industrial recession.

On pages 249–250 of hearings before the Subcommittee on Minerals, Materials, and Fuels of the Committee on Interior and Insular Affairs, United States Senate, 85th Congress, 1st session, on S. 2375, the long-range minerals program, July 29, 31, and August 28, 1957, part 2, Senator Alan Bible asked Mr. John S. Liebert, Special Assistant Secretary for Mineral Resources:

> Can you tell me if there is any future in antimony? I would like to be able to indicate what hope, if any, the Department might hold out for domestic antimony production.
>
> Senator, I cannot foresee that the Department can reasonably suggest that the people who have antimony deposits should produce them—should bring them into production now and insist that it is a critical and strategic material that we absolutely have to have for defense or for industry.

In rebuttal, I state we do not feel that the importance of antimony is just as a critical and strategic mineral. The peak of production of the Stampede mine, the largest antimony property in Alaska, was during peacetime. The Bradley Mining Co.'s antimony mines in Idaho also started operations and had much of their production during peacetime.

Mr. Liebert further stated that the uses of antimony are not increasing at the rate of other metals, but declining. This is open to question. Batelle Institute, Stanford Research, and others, have developed new uses for antimony, and who can say that antimony may not soon reach the same position as mercury?

Ten years ago, no one thought there would be the sudden urgent need for mercury and boron that we have seen in the last few years; in fact, the Government predicted in 1939, reporting it inconceivable that mercury production could exceed 25,000 flasks per year; production reports showed 50,000 flasks 4 years later.

In a letter dated May 21, 1956, Mr. F. E. Wormser, Assistant Secretary of the Interior, set forth the views of the Department of the Interior on S. 2496, a bill to encourage the discovery, development, and production of antimony in the United States, its Territories and possessions, and for other purposes.

He concluded that "We recommend that the bill not be enacted."

Mr. Liebert's statement of "mining out" cannot be accepted. This is the type of thinking that led the president of Petroleum Institute in 1949 to state we would be completely out of petroleum in less than 50 years. In less than 2 years we had doubled our reserves and later found the large offshore fields.

Mr. Wormser stated that, geologically speaking, the possibilities of discovering new antimony reserves were extremely remote. This is, again, the same type of thinking that led leading geologists and engineers of the Government to state the Government surveys showed no minable quantities of scheelite occurring in the mother lode and Grass Valley areas of California.

This has been proved to be erroneous through our exploration program under a DMEA loan.

Another program with a guaranteed market brought about exploration of more uranium than needed as witnessed by recent statements of the Atomic Energy Commission.

Again, this country had no reserves of rare earths until a prospector sent in samples from an area, that had been mapped several times by geologists without observing the large ore body. The market has now been flooded. We recall to you these concrete illustrations, also feeling there is most definitely an erroneous opinion as to our antimony reserves.

Basic information supplied the Interior Committee stated there were 100,000 short tons of measured and indicated antimony ore in the United States.

I know, personally, of 2 deposits alone containing over 60,000 short tons of recoverable ore, this not taking into account potential production of all the properties and all of the occurrences. We, therefore, do not understand the calculation of the figure of 100,000 short tons of antimony stated to be the current reserves of the United States.

As to the market price having to triple or more for the industry in the United States, as stated by Mr. Liebert, or nearly doubling the current world price for metallic antimony, as stated by Mr. J. E. Wormser's letter dated May 21, 1956, this means only that manufacturers at the present time can buy antimony mined with cheap labor and human misery.

The domestic antimony industry has already been injured under the Trade Agreements Act; the tariff on antimony oxide was reduced from 2 cents to 1 cent per pound on June 1, 1948, and this 1-cent rate has been in effect since that date.

The domestic mining industry has been held back by entirely inadequate tariffs and an extension of the Trade Agreements Act, with the possibility of additional tariff reductions on antimony products, which will act as a further deterrent to the development of domestic antimony mines.

May I state, yesterday an article was handed to me which I think is one of the most interesting in all of our research. It is from the American Metal Market, Thursday, March 20, 1958:

ANTIMONY—BRITAIN INCREASES IMPORT DUTIES

LONDON, March 19.—The British Treasury has raised import duties payable on antimony metal and oxides and on certain antimony alloys and mixtures containing antimony oxides to 25 percent or 40 pounds, whichever is greater. The order operates from March 21.

Previously, duties were 10 percent, except on oxides classed as pigment, which were liable to 20 percent. The question of higher import duties has been under consideration by the British Government for some time and is thought to follow representations by British interests.

The foreign metal price is now in line with the price of equivalent grade British metal.

In other words, they had the same situation we have now, but placed a duty of 5 cents per pound. Thus, smelters from other countries, especially Belgium, cannot sell to the United Kingdom at such a low price. The United States should also give us this protection.

In view of strategic military and essential civilian uses and our country's dependence on foreign sources, mostly overseas, for 96 percent of its primary antimony supplies, we urge that consideration be given to encouraging, instead of discouraging, the domestic antimony industry.

At the present time, the primary ore comes in duty free; the metal has an ad valorem of 3 percent. We are importing antimony from countries where supplies would be unavailable in times of emergency, from Yugoslavia, Bolivia, which is politically unstable, south Africa, and from Mexico, where the deposits are declining in grade and amount.

Antimony form in Communist China and in the U. S. S. R. or its satellites has recently been invading the free-world market via Western European smelters. With the cut prices, this could endanger the survival of antimony mines in the free nations. As you may have read, the oxide makers here are being forced to close because of the cheap ore originating in the U. S. S. R. and its satellites.

Unfortunately the information given by the Honorable Royce A. Hardy for data in replying to our miners, is the same as presented by his predecessors, giving no encouragement.

The unfavorable replies when antimony miners request that this ore be placed on the long-range national minerals program has disheartened so many. May we recall to you again a salient point to be remembered, that the Federal Government in 1917, 1940, and 1946 came to the mining industry for aid in developing antimony. The ore was found, mined, and shipped but, as soon as the emergency was over, the Government abandoned the miners.

During interviews with Government officials, statements have been made that most of our antimony properties are small. A good many are small, but there are a great many occurrences, as well to be opened up. As long as the top policymakers are willing to sacrifice the minerals industry of the United States to foreign countries, they will remain small.

Large mines are only developed when there is a steady demand for metal and as for antimony we wish to especially mention the States of Idaho, California, Oregon, Nevada, and the Territory of Alaska, all of which have numerous good possibilities for developing reserves, however, the ore is widespread throughout the West.

Long months of hard work, we feel, have proven we do have the resources, with an exploratory program, for a good future for the antimony industry.

About a year ago our attorney drew a resolution memorializing Congress to appropriate sufficient funds to stimulate the production of certain minerals.

I attended the California and Nevada Legislatures and am pleased to state both passed same, being Resolutions No. 18 and No. 25; then forwarded copies to all legislatures throughout the United States, requesting their cooperation. Seemingly, we have been the first of the ore groups to put our "shoulder to the wheel," "stepping over" to work for other domestic minerals.

As a member of the Committee for a National Minerals Policy, I organized the American Antimony Committee to continue to work specifically for antimony.

The Alaskans being so appreciative of our efforts, it was deemed advisable to have Mr. Earl R. Pilgrim from the Territory as our vice chairman.

Unemployment is a vital topic of the day. A most interesting article was recently read on a building project with emphasis to give employment to the construction industry. Why the preferential aid to the builder, the farmer, and neglect the miner?

In at least a few thousand letters to the United States Senators, United States Congressmen, the United States Department of the Interior, State governors, members of State legislatures, and other officials, we have endeavored to present to them the facts, as we people actually and financially interested in antimony mining see them. We most earnestly request that you assist us in seeing that antimony is placed on the long-range national minerals program.

We have prepared a statement, Salient Statistics for Antimony in the United States, 1925–57; source: Bureau of Mines Minerals Yearbooks (short tons, contained antimony), available for all members of the committee as well as others interested.

We are supporting the Western Governors Mining Council, appreciating the resolution adopted February 28, 1958, at the business session, Colorado Springs, Colo.

I quote:

> As to antimony, chrome, asbestos (and possibly manganese), the House Ways and Means Committee to approve legislation allocating import receipts to maintain a minimum nucleus of production in these metals.

We trust this resolution will achieve the favorable results that we are so earnestly looking for, since it will assist in the life's essence of the whole industry.

Less than 10 years ago, domestic miners supplied 42 percent of domestic primary consumption, while today, they supply less than 5 percent.

Somehow the antimony miners have looked to me for justice of domestic production and a happier day.

We believe the "baby moons" or satellites have been one of the greatest warnings since the ringing of the Liberty Bell; therefore, as chairman of the American Antimony Committee, and representing these many miners, we will continue to work in behalf of domestic mining, feeling it is a rightful heritage to operate our mines.

Thank you.

Senator MALONE. Thank you, Mrs. Priester.

We are very glad to have you here. You have been very active in this industry in the Western States.

What did you mean when you mentioned our top policymakers?

Mrs. PRIESTER. I meant the men in the Department of the Interior and the State Department, and others.

Senator MALONE. They are unable to do anything if Congress doesn't vote for it.

Mrs. PRIESTER. That is certainly true. Of course, Congress, too.

Senator MALONE. I think you had better get back to Congress.

Mrs. PRIESTER. We miners are all looking to Congress to greatly assist us.

Senator MALONE. We used to be the top policymakers before 1934, didn't we?

Mrs. PRIESTER. Yes.

Senator MALONE. Well, now, the suggestion of yours that "allocating import receipts to maintain a minimum nucleus of production in these metals"; isn't that just a kind of a stopgap or patent medicine to stay in business, Mrs. Priester?

Mrs. PRIESTER. No. I understand from the resolution by the Western Governors' Mining Council that they certainly do want a long program.

Senator MALONE. I understand that too.

But do you know how much these receipts might mean and what they would mean per unit or per ton if it were applied?

What amount of import receipts from each of these metals or minerals do you get now, and how far would it go if you start to pay it out?

Mrs. PRIESTER. At the moment I don't know exactly what they have figured.

Senator MALONE. I don't know whether anybody else does either right now or not.

And, as a matter of fact, it might not even touch the subject.

Mrs. PRIESTER. That may be.

Mr. PILGRIM. There would have to be special legislation, wouldn't there, to change it? Nothing in use now would work, I think.

Mr. REDWINE. May I suggest that Mr. Pilgrim identify himself at this time for the record.

Mr. PILGRIM. Earl R. Pilgrim. I am a resident of Alaska. I have been a resident of Alaska for 37 years.

Senator MALONE. Do you live in Alaska?

Mr. PILGRIM. Yes.

Senator MALONE. You really are a "pilgrim" down here in Washington, aren't you?

Mr. PILGRIM. That is right.

Senator MALONE. You are welcome and we are glad to see you.

Now, what I would like to find out from you, Mrs. Priester, and you Mr. Pilgrim, is what you really want is to get back on a principle, not only in mining, but every other product in the United States, do you not?

Mr. PILGRIM. I would much prefer to get the mine open and keep it operating. I am not familiar with your mining down here. And I have read——

Senator MALONE. We do not have any now.

Mr. PILGRIM. No.

But in the antimony business I have heard in some of these hearings their requests for a hundred percent tariffs and all of that. And I never asked for that. Because I know what we can operate on up there.

We have a transportation problem much greater than anything you have down here. But we also have ores that are much better than anything you have down here.

And perhaps if I read this to you, it would be clearer.

Senator MALONE. Yes.

You may proceed.

Mr. PILGRIM. A few things I have put in. There seems to be a misunderstanding among some Government offices like the Office

of Defense Mobilization, GSA, as to what the price of metals are at times.

Senator MALONE. Do you think that is a misunderstanding? Maybe they thoroughly understand what they are doing. I think they do.

And it is not intended that you be in the mining business. That might be news to you. But we are glad to have you here to get your ideas about it. Some of us intend to get back in the mining business as well as the textile business.

And while I am talking about it, here is a nice linen napkin that I just picked up off the Senate dining room table. It says "Made in Western Germany."

I suppose your mining, your antimony, and tungsten, and manganese would be made in some other country. But no textile industry can compete with a napkin made in Western Germany.

It is exactly the same as antimony or anything else.

Mr. PILGRIM. Before I forget it: That article that Mrs. Priester read—I don't know whether that is clear or not, but the Government of the British Empire, they didn't ask for their legislative body to make this duty; it is established by them.

Senator MALONE. It is established by executive order, isn't it?

Mr. PILGRIM. They just set it out, yes.

Senator MALONE. You see, nearly every nation in the world has it arranged so that all they have to do to protect their industry is just put out an order. And they are very smart.

And we are today the only free-trade nation in the world. Other nations that have trade agreements with us, either multilateral or bilateral—multilateral made in Geneva, or bilateral made by the State Department or their executives—there is a gimmick that they don't have to abide by their part of the bargain as long as they are short of dollar balance payments.

They can show that until our wealth is entirely divided among them.

Mr. PILGRIM. It is getting pretty well divided too.

Well, that amounts to 40 pounds per ton—I presume it is a long ton—if they just said on there that is just like saying we are putting 5 cents a pound on Belgium or any other country shipping metal, antimony, into our country. Then they will cry their eyes out at our request to put up a little duty or some restrictions.

Senator MALONE. It might be appropriate at this time to say that other nations, especially the European nations who have lived rather at wits for 300 years on colonial nations or others—you can take freight rates, for example: our tariffs—and if you have a leeway of 5 or 10 percent of fixing freight rates or tariffs, you can dry up any area or make another area produce. You understand how that would be?

I served 8½ years on our ratemaking body at one time, the Public Service Commission of Nevada. Before I had been on that ratemaking body a month, I said give me a leeway of 10 percent and I will dry up any part of the country or develop any other part.

And they were doing it up in New York. But tariffs work the same way. They know by long experience that if they protect their industries, have a tariff or a duty or import permit or exchange permit, then in order to get their markets, investors have to build plans or mines in their country. Then if they can get the free trade or the free imports into a market like ours, the production plant or the mine

will be located in their area, and then their markets will be furnished and they tax the plant and then they can sell to other nations.

So, it is the same thing that has been going on for 300 years.

And, of course, these nations take advantage of it. So, the only chance, it seems to me, and has seemed for a long time, is just to go back to the Constitution of the United States. It is not very far back.

If we just sit still this session and do not pass anything, we are operating under the Constitution, I guess. And then you would have the tariff on which a fair and reasonable competition is based, so that the American workingman and American investors would be competing with each other for the American market.

Woud that sound reasonable?

Mr. PILGRIM. It sure would to me.

Senator MALONE. You are an American up there. You would be competing for the American market?

Mr. PILGRIM. We are kind of second-class Americans.

Senator MALONE. How do you explain that?

We might as well get into that. How do you explain second-class citizens? Do they charge you anything to bring your stuff in?

Mr. PILGRIM. I am 65 years old, and I have never voted for a President. There was once or twice when I was in the Armed Forces in World War I or in some new camp and had not been a resident long enough to vote. Otherwise, I have been up in Alaska—Alaskans have no right to vote.

Senator MALONE. You are talking for statehood?

Mr. PILGRIM. I didn't come to this meeting to talk for statehood.

Senator MALONE. Well, then, what did you mean by this remark that you were a second-class citizen?

Mr. PILGRIM. That is commonly believed up there by residents of Alaska.

Senator MALONE. Do you have any trouble selling your stuff here in the market? Does it cost you anything?

Mr. PILGRIM. Yes, but not because——

Senator MALONE. Not because of being second-class citizens?

Mr. PILGRIM. No.

When I came in Thursday, when I arrived in Seattle, I had to produce evidence that I was a citizen of the United States.

I had to tell the customs officer that I was born in the United States and where I was born, the town, and I had to produce evidence that I was a citizen.

Senator MALONE. Well, I live in Nevada, and I have to produce it when I come in.

Mr. PILGRIM. To Washington?

Senator MALONE. From England or some place like that.

Mr. PILGRIM. But Alaska is part of the United States.

Senator MALONE. I like Alaska. I have been all over Alaska. I am the one they sent in behind the Japs in Dutch Harbor.

I made a report on Alaska in World War II.

Mr. PILGRIM. It is a darned good country.

Senator MALONE. You have tungsten up there and a lot of things. I made an industrial report of Alaska and the 11 Western States and the Philippines and Hawaii.

Did you ever seen that report?

Mr. PILGRIM. No.

Senator MALONE. You ought to take at look at it. It is a pretty good report.

Mr. PILGRIM. I have seen just about every place in Alaska.

Senator MALONE. I think your evidence is going to be interesting if you want to confine it to your subject.

Mr. PILGRIM. I come from three generations of miners. And all we are interested in—or all I am interested in in Alaska is to try and get this mine and others operating so that they can sell enough ore and keep a few miners employed. So with your permission I will present my statement at this time.

Senator MALONE. Proceed.

STATEMENT OF EARL R. PILGRIM, VICE CHAIRMAN, AMERICAN ANTIMONY COMMITTEE

Mr. PILGRIM. My name is Earl R. Pilgrim. I have been a resident of Alaska for 35 years. For three generations my people have been miners in the United States.

Since 1937 I have been trying to make the Stampede antimony into a continuous successful operation. When that prospect was taken over and work started there was no thought or expectation of operating the mine as a war project. It was hoped the mine would have a long and useful life of peacetime operation.

We are not looking for a war nor are we hoping for one. All that we are interested in is to have a fair opportunity to mine and sell enough ore to support a few American miners with their families.

We have mined and shipped to the stateside smelters over 2,600 tons of crude high grade ore and also 900 tons of mill concentrate.

Senator MALONE. Is this antimony you are talking about?

Mr. PILGRIM. Yes, sir.

Recently because the stateside market was so glutted with Mexican, Bolivian, south African, Yugoslavian, and other foreign countries' ores, we made two shipments to Kobe, Japan.

We have a little bit of a chance to compete with them on transportation from Bolivia.

Senator MALONE. You understand we have to give all these other nations a market for their minerals and textiles and all the rest of these products; don't you?

Mr. PILGRIM. Yes, sir.

I know we should give them a certain market. I do not see that we should give them the full market.

Senator MALONE. Not quite all of it.

Mr. PILGRIM. No.

Senator MALONE. That sounds reasonable to me.

Mr. PILGRIM. We are now closed down and shall remain so unless something is done to improve our lot. We have plenty of milling ore, plus 8 percent antimony—and we call that milling ore there. I understand there is a mining company operating on ore running around 2 percent, but we consider up there we had to have 8 percent to be workable.

And a very fine body of high grade recently opened up. We have a certificate of discovery from the Defense Exploration Agency, referring to that new body.

One shipment of this material to a smelter in 1956, we paid for almost 68 percent antimony.

Senator MALONE. What date of the shipment was that? Was it during the war?

Mr. PILGRIM. No. It was in 1956.

Senator MALONE. What did you get for it?

Mr. PILGRIM. We received $3.65 a unit.

Senator MALONE. Is that a profitable price?

Mr. PILGRIM. Yes.

Senator MALONE. How does it come to be a profitable price then and not now?

Mr. PILGRIM. Well, the price we would get now would be around—would be less than $3. We probably might get $2.80, or $2.90 a unit for it.

Senator MALONE. Then the imports from these other countries that you mentioned has destroyed the market for you?

Mr. PILGRIM. Yes, sir, absolutely.

Senator MALONE. What do you think would be the answer to that?

Mr. PILGRIM. I heard this gentleman from the Engineering and Mining Journal this morning refer to agreement by the mine operators themselves, which I believe the copper miners could do.

Senator MALONE. Copper?

Mr. PILGRIM. Yes.

Senator MALONE. Then, you are in another metal?

Mr. PILGRIM. Yes.

But in our case antimony is such a small business and widely scattered, that the producer, the little mines in Mexico, and leasers, and Bolivian miners, and how could you get Mr. Tito to agree to restricting these imports?

Senator MALONE. He is our friend; isn't he?

Mr. PILGRIM. As long as we keep dishing it out to him I expect he is.

Senator MALONE. Your statement that copper miners could agree—as I recall in 1955, when we extended the 1934 Trade Agreements Act for 3 years, that under my questioning the President of Standard Oil of New Jersey said that he thought the international oil companies—he is one of the largest—should be allowed to fix the amounts of imports, decide how much ought to be imported and how much produced here.

I quit him at that point.

Now, you want the copper miners to do that?

Mr. PILGRIM. I believe they could.

During the depression years, if I remember right, copper miners all over the world by mutual agreement cut down on their production and were able to maintain certain operation. I am not telling the copper miners how to do but it is a sure thing the antimony miners cannot do that.

Senator MALONE. You are in the copper business. Let's stay in it a minute.

Do you know that the independent copper miners are going out of business pretty fast?

Mr. PILGRIM. Yes.

Senator MALONE. And as long as it is decided by copper people to do that, we will produce no independent copper mines in the United States.

Their price goes just below their break-even point and then the price can go as high as 54 cents a pound, which it did here about 3 or 4 years ago.

Mr. PILGRIM. And some foreign copper miners have closed down already in British Columbia.

Senator MALONE. Don't you think it might be well for Congress to take it as their responsibility again and fix some principle upon which imports come in on some fair and reasonable competitive basis?

Mr. PILGRIM. I am sure they should, in regard to antimony.

Senator MALONE. Well, let's stay with antimony a while, then.

Mr. PILGRIM. Because of the uncertainty of the antimony market we have never been in a position where we could pursue an overall plan of mine development and road construction to aid in a more efficient operation.

My experience in mining antimony ores goes back to 1925. During all this time the market has been a long series of ungoverned market surpluses, each followed by a long wait with prices down until the smelters cleaned up these surpluses, then a short firm rising market buildup to surpluses, then down again for the market to clean itself.

Senator MALONE. When did that start?

Mr. PILGRIM. When I became interested in antimony; the first ore I shipped out of Alaska was in 1925.

The only stable market that we have experienced over this long period was during the war years 1942–46, with prices fixed.

We received only $1.98 per short ton unit then.

In general when the market opens up as demand increases, the foreign mines get deliveries underway before we do. Much of our trouble has been because we had to wait for mid-winter to haul our ores for shipment.

Senator MALONE. Do those foreign mines produce this ore metal at a lower cost than you can?

Mr. PILGRIM. Undoubtedly they can produce it at a lower cost.

Senator MALONE. Why?

Mr. PILGRIM. Because of cheaper labor and cheaper transportation.

They have got the advantage on us in two ways. In the case of Yugoslavia, Mr. Tito took over the mines without paying for them.

We gave him 40 or 50 million dollars worth of credit to buy modern machinery, which was to be paid back on long term.

I do not know whether there was any interest collected or not. If I want to buy some machinery, I maybe get 30 days on it.

Senator MALONE. I guess he has neglected to pay any of it back. But don't you think we have to develop these backward areas?

Mr. PILGRIM. I don't believe in killing them off, but we should not kill ourselves off either. They are our friends.

Senator MALONE. Then Mr. Tito is our good friend?

Mr. PILGRIM. Well, maybe he is. Let us hope so.

Senator MALONE. All right, go ahead.

Mr. PILGRIM. The foreign mines can ship lower grade ores to secondary smelters than we can because they have cheaper transportation costs.

Senator MALONE. They have cheaper labor?

Mr. PILGRIM. Yes.

Senator MALONE. And they have the same machinery now?

Mr. PILGRIM. Yes. Quite often.

I guess some of the mines, like Mexican mines, some of them are not as modern as we are.

Senator MALONE. Especially when they are financed by American capital.

Do you have any idea how much American capital has gone into foreign industries now?

Mr. PILGRIM. Well, I know the national lead has heavy interests in Mexico.

Senator MALONE. There is over $50 billion in it since World War II—around that time. And we have given him more than $70 billion to do the job with, just the taxpayers. I guess you bear your part of that. That makes you first class.

Mr. PILGRIM. First class on taxpaying day.

We have always tried to keep our ore grade to above 60 percent. That is classed as chemical grade and is supposed to command a better price, but we have sold quite a bit to secondary smelters at a lower price.

We do our best to get in on the rising market at each upward trend, but generally by the time we have one or two 40-ton lots on the way, the bloom is off and the market has started down.

Senator MALONE. In other words, Mexico and Czechoslovakia has beat you to the punch.

Mr. PILGRIM. That is right.

We have been isolated. We had to wait for the winter; to haul our ores to railroads we had to wait until the 1st of January before we could start and do this freighting in the extremely cold part of the winter, about 3 months. We built an airport ourselves, with a 4,300 foot runway.

We have flown quite a bit of our ore with C–46 freight planes, when we had a good price for it.

Senator MALONE. I think you have done a marvelous job as far as you have gone. I think it is one of the greatest mineralized areas in the world.

I don't think it has had a break. You are in the same position as our domestic mines. They are down too. You know that, don't you?

Mr. PILGRIM. Yes.

Senator MALONE. For the same reason?

Mr. PILGRIM. Yes.

Then we are again in for a long wait for the smelters to clean up the surplus ores piled in their yards which they purchased very cheaply.

We have often had to hold ores at the mine after mining after the market was good until winter had given us a sled road for shipping.

This surplus ore accumulated at the smelters on a fallen market is often sacrificed by the foreign shipper who had his ore on the way when the market dropped. This sort of economy in my opinion is not good for the foreign miner, not good for the domestic miner, and probably over the long run not good for the domestic smelters.

I have had letters at various times from the secondary smelters which say we have got two or three hundred tons of our accumulated. We bought it for prices—for giveaway prices. These people had it on the way and just unloaded it.

And they pile that up and it takes them a year or two to dispose of it before they can clean it up.

Senator MALONE. You think we ought to have some kind of a principle established by Congress then upon which you could depend, being a domestic producer?

Mr. PILGRIM. Yes.

Market prices as quoted by the Engineering and Mining Journal metal and mineral market reports are set mostly by the Laredo smelter.

This plant is the only one in the United States making a refined antimony metal for the general market. Their ores are obtained from foreign sources. We have tried to get them to smelt ores for us for the Government stockpile in the hopes that we might stay alive until conditions bettered.

Generally the price on metal is higher than the actual price they pay for ore—I mean the price they quote for the ores is generally higher than actually what you can sell your ore for. We have almost always had to sell our ore for less than the Laredo smelters' price.

Laredo is not interested in smelting other than foreign ores. For several years now the Government has had a stockpiling plan for antimony which would not permit a domestic mine to participate unless he built himself a smelter.

Up in Alaska we considered very seriously doing just that to make antimony metal for stockpile, but ODM's system at that time of opening and closing the stockpile discouraged us in that.

Our Alaskan antimony ores have been sold to the smelters generally by negotiated contract for each lot. The price paid for these ores is invariably lower than the price of such grade of ore as published in Engineering and Mining Journal market reports.

In 1956 they showed antimony bulk at 33 cents and minimum 60 percent antimony ores $3.80 to $3.90, minimum 65 percent, $3.95 to $4.15.

And that is a short ton.

On January 30, 1958, the same report gave metal bulk 33 cents and antimony ore minimum 60 percent, $2.40 to $2.60, minimum 65 percent, $3 to $3.10.

The refined metal remained at 33 cents, but the ore price dropped about 25 percent.

As stated before, most ores are purchased by bargaining. As of February 14, Laredo price of metal was dropped 4 cents per pound, a drop of 12.1 percent.

When we found that there was no smelter available in the whole United States to smelt domestic ores for stockpile, we suggested that the Office of Defense Mobilization try to have the stockpiling system changed so that oxides and ores could be stockpiled as well as metal.

You know all about the stockpiling. It was created and established, but we could not sell any ore to that stockpile because there was only one smelter in the United States making refined antimony metal suitable for stockpiling. And that was Laredo. And they didn't want our ore.

Senator MALONE. Where did they get their ore?

Mr. PILGRIM. It comes from Mexico. It is built just over the border.

Senator MALONE. Do they get it a little cheaper there?

Mr. PILGRIM. Well, they own most of the mines, or quite a few of them anyway.

Senator MALONE. The smelter owns the mines?

Mr. PILGRIM. Yes.

The ore comes over the border duty free. And they smelt it on this side.

Senator MALONE. And it is cheaper production down there?

Mr. PILGRIM. Well, that smelter was built by Cookson, an English company, originally and National Lead bought it from them.

Senator MALONE. I mean the ore can be produced cheaper in Mexico.

Mr. PILGRIM. Yes. Sure.

Senator MALONE. What are the wages down there in Mexico?

Mr. PILGRIM. I don't know.

I know one man who was in charge of work down there in 1937, I told him we paid at that time $6 a day for labor and fed our men too.

Senator MALONE. What year was that?

Mr. PILGRIM. 1937.

And he said we pay our men a dollar a day—that was in Mexico—and they feed themselves.

Senator MALONE. What are the wages now in Alaska?

Mr. PILGRIM. About $2.20 for miners.

Senator MALONE. An hour?

Mr. PILGRIM. Yes.

Senator MALONE. That is about that much a day down in Mexico now, isn't it?

Mr. PILGRIM. I don't think it is more than that.

Senator MALONE. Then you need something to even that price, to make up the difference?

Mr. PILGRIM. We need a little bit. We don't need too much.

Senator MALONE. What do you need? What do you want?

Mr. PILGRIM. Of course, costs keep climbing. But we could be operating at Stampede—if we were getting four dollars a unit for our ore, which is about the equivalent of a 35-cent market.

In connection with that transportation costs have been climbing too, like the Alaska Steamship Co. and the other steamship company; they raised the rate. They raise it about every 3 years, a little bit.

And we are dependent upon them for transportation to get our ores out.

Senator MALONE. Well, it wouldn't take very much of a duty as provided in the Constitution to put you in business, would it?

Mr. PILGRIM. No, it would not.

We could do it just easy under present conditions if we had the duty similar to what the lead people have.

Senator MALONE. In other words, if we don't extend this 1934 Trade Agreements Act and no more agreements can be made after June 30, then those that have been made, and the Tariff Commission goes to work, that would probably satisfy you, and provide a duty on the basis of fair and reasonable competition?

Mr. PILGRIM. I believe it would.

There are other properties up there that could operate.

During World War II antimony ores were stockpiled and I do not see it unreasonable to suggest that domestic antimony miners be permitted to sell ore direct to the stockpile especially when no domestic smelter cared to bother with domestic ores.

Our Alaskan ores are as high grade as any from any other part of the world. They are sulfide ores as are most Bolivian, some Mexican, and others.

Our Alaskan ores are remarkably free of arsenic and other common impurities. If the stockpile plan had included antimony ores from domestic mines, I am sure that by now we would have many well developed small mines available to take care of much of the Nation's requirements.

Even with the present duty there has been a steady flow of refined metal into the United States from foreign sources.

That is, refined metals from foreign countries.

Senator MALONE. Why is that?

Is it because it is cheaper to produce there and there is no tariff to amount to anything?

Mr. PILGRIM. Yes.

There is cheaper labor over there. We have a duty but they ship it in here just the same.

Senator MALONE. What kind of duty do we have?

Mr. PILGRIM. It is 3 percent I believe.

Senator MALONE. It doesn't make up the difference, does it?

Mr. PILGRIM. No.

I believe if it was raised they would still ship it in.

Senator MALONE. If you took the profit out of that cheap labor, they would not ship it in very long, would they, with a duty?

Mr. PILGRIM. I don't think so.

Senator MALONE. We have some pretty smart investors in this country. And they go abroad with their machinery.

I don't blame them for doing that. I blame the Congress for making it profitable. You cannot blame the President of the United States for doing something that he couldn't do if Congress didn't vote for it; can you?

Mr. PILGRIM. No, no; of course not.

Senator MALONE. Well, I don't blame them for doing that either.

I think the President of the United States is one of the finest Americans I have ever seen.

But if Congress puts it in his hands and the overall sentiment around his area is to do this, I don't think we can blame him. I think we should blame the Congress.

Mr. PILGRIM. No, we can't blame him.

Senator MALONE. Or the State Department either.

Mr. PILGRIM. Being a second-class citizen I had better not talk too much.

Senator MALONE. You go right ahead and talk, because you get the advantage of every trade protection that we get in the United States. Is that true?

If we had a duty on antimony that made the difference in the labor cost or the cost of doing business here as distinguished from those cheap competing countries, you would get the advantage of it just the same as Nevada or Idaho or any place else, wouldn't you?

Mr. PILGRIM. That is right.

We have some things that work against us, like canned salmon in Alaska has to come to Seattle and then come back to Alaska before we could buy it.

Senator MALONE. Couldn't Congress fix that if they had a mind to?

Mr. PILGRIM. Yes.

Senator MALONE. I think maybe they will some time if we talk enough about it.

Go ahead on your antimony.

Seattle was pretty smart to get that done, weren't they, Mr. Pilgrim?

Mr. PILGRIM. Yes.

That makes a lot of money for them.

Senator MALONE. In the early days if we had thought about it, we might have had it come to Reno.

Mr. PILGRIM. This amount of foreign antimony metal since 1951 has fluctuated between 14 percent and 32 percent of the total import.

In peacetimes antimony always sells in most foreign countries for considerably less than the tariff differential. I believe that an added increase of from 3 to 4 cents per pound of antimony metal tax and also on ores will not work a great hardship on the foreign mines.

Senator MALONE. Let me ask you a question there.

Why are we worrying about the foreign miners? Why don't we think about the American miner?

Could you tell me what a 4-percent duty would mean in the end product?

That is to say, what you use antimony to manufacture, or in the manufacture of some product, what would the 4-percent duty mean in the cost, the difference in the cost of the end product?

Mr. PILGRIM. Well, I imagine it would be this 4 percent added onto the metal, because the other processing it goes through——

Senator MALONE. But antimony is only a small part of the manufacture, isn't it?

Mr. PILGRIM. I am thinking of antimonial lead or oxide or any other——

Senator MALONE. Well, in the end product—and that is what counts in this country—the tariff that is necessary to make the difference in wages and taxes and the cost of doing business here and in a cheaper competing country generally speaking means a very small difference in the cost of the end product, doesn't it?

Mr. PILGRIM. Yes.

But antimony metal is a finished product, or oxide. It is turned into an antimonial lead for storage batteries, or it is made into——

Senator MALONE. That is right.

But I am talking about the storage batteries. Now, there are a lot of things that go in it besides antimony.

Mr. PILGRIM. Yes.

In the case of storage batteries, there is only about 4 or 5 percent antimony in it.

Senator MALONE. What I am trying to get you to do—and I wish you would do this—is submit a further statement, and I think we might make some progress. List the products that antimony—list the products where antimony is used, and these end products, these manufactured products, like batteries; tell me how much difference it would make if the antimony went into a $25 battery that goes into my automobile; if you had a 4-percent duty on it, how much it would

raise the cost of the battery. And that is what I am interested in and what all of us consumers are interested in.

Mr. PILGRIM. That would be very low.

Senator MALONE. You could not find it, could you?

Mr. PILGRIM. Because there is only, say, 5-percent antimony. Then you take 4 percent of the cost of the 5 percent, and it wouldn't be much.

Senator MALONE. You couldn't find it in the cost of the battery, could you?

Mr. PILGRIM. No.

Senator MALONE. I think you would make a lot of progress and spend the time and list the products where antimony is used and give the committee the advantage of your estimate of how much, or what percentage, it would increase the cost of the end product if you had the protection you need, on principle, established by Congress to protect your industry. And that might even do Mrs. Priester a little good in Nevada.

Mrs. PRIESTER. Yes, I think ours would have to be considerably higher here than what he stated.

I would like to submit a statement.

Senator MALONE. The two of you submit a list of that kind. You are here now. I wish you would do it. I think that would do you some good.

Mr. PILGRIM. I have enough information, I guess, to do it.

(Mr. Pilgrim subsequently submited the following information:)

This brief shows the cost effect of a 5-cent-per-pound duty on antimony when applied to various manufactured products:

Item I. Antimonial lead: Antimony is commonly used to harden lead. The antimony content of antimonial hard lead depends upon uses, ranges from 4 percent or lower for rolled sheets for lining and roofing to 28 percent for special purposes. Battery leads commonly contain from 4 to 7 percent antimony.

An example of battery-lead use is shown below: 3-cell, 15-plate automobile battery selling in Washington for $21.95 contains 9 pounds of hard lead.

The amount of antimony in the hard lead of this battery is about 6 percent, or 0.54 pound.

Price of antimony, March 1958, 0.29 cents per pound.

Value of antimony in this battery, 0.15⅔ cents.

If 5-cent-per-pound duty is added to antimony metal in this battery, it will increase the cost of the $21.95 battery to $21.977, an increase of 2.7 cents.

This is an overall cost of 0.123 percent.

In 1957, approximately 1,706 short tons of antimony was used as antimonial and battery lead.

In the nonmetal-products field, approximately 1,347 tons of antimony oxide was consumed for flameproofing paints, pigments, and plastics.

An example of nonmetal use of antimony is shown below:

A gallon can of fire-retardant paint contains 1 pound of antimony trioxide and sells for $6.15.

One pound of trioxide contains 0.72 pound antimony.

A duty of 5 cents per pound will amount to 3.6 cents, added to the present price, makes the paint cost $6.186 per gallon.

The total value of the paint would be increased 0.58 percent.

Antimony uses are shown on the accompanying table copied from Bureau of Mine Mineral Industry Survey Antimony Quarterly Report No. 18 of Primary Antimony in the Fourth Quarter of 1957. In most of these uses, the percentage value of the antimony used in the manufactured product would be still less than as shown above.

Consumption of primary antimony, by uses, in 1956 and January–December 1957, in short tons, antimony content

Uses	1956	1957 [1]			Preliminary total
		January–June	July–September	October–December	
Metal products:					
Ammunition	14	2	(2)	----------	2
Antimonial lead	1,692	450	206	208	864
Battery metal	1,215	443	170	229	842
Bearing metal and bearings	1,077	460	206	195	861
Cable covering	190	67	31	39	137
Castings	57	28	37	24	89
Collapsible tubes and foil	12	7	5	(2)	12
Sheet and pipe	300	132	56	57	245
Solder	144	42	17	15	74
Type metal	528	189	54	75	318
Other uses	137	22	17	24	63
Total, metal products	5,366	1,842	799	866	3,507
Nonmetal products:					
Ammunition primers	13	6	2	1	9
Antimony sulfide (precipitated)	45	30	(2)	(2)	30
Fireworks	37	16	8	(2)	24
Flameproof coatings and compounds	423	60	34	27	121
Flameproof textiles	659	183	84	81	348
Frits and ceramic enamels	957	287	100	158	545
Glass and pottery	1,231	433	131	127	691
Matches	18	4	(2)	(2)	4
Paints and lacquers	573	43	31	24	98
Pigments	853	327	155	143	625
Plastics	976	271	117	134	522
Rubber products	156	31	43	(2)	74
Other uses [3]	1,590	508	199	391	1,098
Total, nonmetal products	7,531	2,199	904	1,086	4,189
Total reported	12,897	4,041	1,703	1,952	7,696
Estimated grand total	12,897	5,461	2,301	2,638	10,400

[1] Based on reports from respondents that consumed 74 percent of the total antimony in 1956. Grant total estimated 100 percent.
[2] Combined with "Other uses" to avoid disclosure of individual company operations.
[3] Antimony trichloride and sodium antimonate included to avoid disclosure of individual company operations.

Senator MALONE. We have done that in tungsten and manganese. You heard the testimony on manganese. You cannot find it in a ton of steel. The protection on manganese—you couldn't find the difference in a ton of steel.

Mr. PILGRIM. A good bit of antimony is used in trioxide.

Senator MALONE. In connection with what?

Mr. PILGRIM. As a pigment. Trioxide is—Mr. Bradley is far superior to me in that subject.

Senator MALONE. He testified this morning. I was not here. But you can consult with Mr. Bradley. Now, all this antimony is used in connection with some other material that would go into the end product to use in industry?

Mr. PILGRIM. In general, yes. But this one used in the trioxide is coming along stronger as we go along.

Senator MALONE. But what is it used in?

Mr. PILGRIM. It appears to be the best covering material for pigment known of pure white——

Senator MALONE. What do you use it for?

Mr. PILGRIM. Enamels and such.

Mrs. PRIESTER. It is used for defense purposes, fire retardants, ammunition, and so forth.

Mr. PILGRIM. Yes.

Senator MALONE. All right. When you finally have the end product manufactured, if you will just let us know how much that protection that you need would increase the cost of that end product, I think you will find that nobody pays attention to it. It would be very helpful.

Bring in a supplemental statement as soon as you can so it will appear in this record.

Mrs. PRIESTER. Thank you.

Mr. PILGRIM. It certainly would not be as much of a hardship to those mines as the complete extermination of all domestic mines and the extermination of any possibility of developing new mines.

Senator MALONE. Is this what you would call an undeveloped country?

Mr. PILGRIM. It certainly is, compared with down here. There are six rivers in there which are impassable.

Senator MALONE. I want you to describe it for the record. Do you think it would come under the head of an undeveloped country that we talk about so much in the Congress and other places that we are trying to help over the world? Do you think it would qualify under that?

Mr. PILGRIM. I would say 90 percent of Alaska is an undeveloped country.

Senator MALONE. I tell you what I told Congress when I left last year. I said, if you are looking for undeveloped countries to help, if you go with me about 30 days I will show you some undeveloped country. And, also, I will show you some country that has been developed by private capital and has gone back to the brush through the votes of Congress. Is that about right?

Mr. PILGRIM. That is right.

Senator MALONE. Go ahead.

Mr. PILGRIM. Where we are located, the railroad is 50 miles one way and 200 miles in any other direction before you see anybody or meet anybody.

Senator MALONE. I have ridden over the railroad.

Mr. PILGRIM. And the Alaska Range is between us to the south, high mountains and Mount McKinley, 20,300 feet.

Senator MALONE. I flew over it.

Mr. PILGRIM. That is directly south of us.

Senator MALONE. We went over the Alcan Highway before it was completed. We stopped at the little town up there where General Hoke had his headquarters to build the Alcan Highway. And then I made a report.

Mr. PILGRIM. Dawson Creek.

Senator MALONE. I made a report on that Canol oil project. We turned it down. So, I know your country. I know what you are talking about. And you are right about it. But what we are doing is we have our eyes all over the world. We are going to help Yugoslavia and all these other countries.

All we have to do is just sit still and get back in business. This trick bill passed in 1934 during the depression expires on June 30; and let the Tariff Commission fix that tariff; that I think you will find it makes little difference in the end product.

And I think you are back in business. But you are not talking about anything like that. You are trying to find some patent medicine that applies to it.

Come in with a statement when you figure out what this difference in cost would be.

If every product, about 5,000 of them, comes in with something that you have to determine this and that and the other and have a special piece of legislation on every product, I don't think Congress is going to go very far. And the textiles are gone now, as witness this nice napkin, probably one of the best in the country. But it didn't cost nearly as much.

Mr. PILGRIM. Well, I have got this statement here, which probably covers some of that.

At Stampede we have a mine with underground workings, machinery installed, tractors, and other equipment which is in an isolated part of the country. It would not pay to move any of this to any place that I know of. There will be an abandoned mining camp, as you have read about, only it will not be because of the mine exhausting its ore, but because of a different kind of foreign aid than the one we normally read about.

It is my personal belief that the best relief for domestic antimony mines will be a quota plan. At the beginning, some errors in quotas for domestic mines would be encountered because of the time required for those mines, which have been almost kicked to death, to revive.

Under present labor and other costs, I am sure that some Alaskan mines can operate on a 35-cent metal price or an ore price of $4 per short-ton unit for 60-percent ore.

If our Stampede mine was permitted to mine and sell even as small an amount as 100 tons of antimony in the form of ore or concentrate per year, at the above prices, it could be kept alive. Ice and water could be kept out of the workings, the workings timbered, and all kept in condition for greater production should an emergency develop.

At the same time, our foreign friends could be mining, also.

Senator MALONE. Hadn't you better talk about how to keep your stuff in operation? Let's get at it here and sort of figure out how to operate in America. I got well acquainted with Mr. Khrushchev and Mr. Bulganin. I traveled 14,000 miles over there. Mr. Bulganin and Khrushchev are for Russia. If we could develop a couple of men for the United States of America, it would be very helpful. So, I wouldn't worry about that. I would go ahead and see how to keep you in business.

Mr. PILGRIM. Yes; I know. But I have just about——

Senator MALONE. We have a lot of people here worrying about foreign nations.

Mr. PILGRIM. I realize that. The point is: Are they worrying about us?

Senator MALONE. All right. Go ahead.

Mr. PILGRIM. If we have to remain closed down for very long, we may just as well write off for good over a million dollars of good antimony from one property in Alaska, and how about many others in Nevada and Idaho?

I am not very familiar with stateside mines, but I know of more than 30 Alaskan prosjects and mines which, if a reasonable opportu-

nity were offered, would sustain considerable antimony production. Of these 30 or more, about 10 have already produced over 5,600 tons of ore containing 3,000 tons of antimony metal.

In Alaska, and especially in the interior, the chief hindrance to mine operations is not climate, but transportation.

Our operations at Stampede have involved moving our ores, as well as other heavy freight, 50 miles by tractor-drawn sleds during January to April with temperatures sometimes lower than 50° below, then over the Alaska Railroad 370 miles to the seaport of Seward, and then 1,500 miles by water to Seattle, which is still some distance from a smelter.

We have shipped ores from Stampede to New Jersey, Baltimore, Chicago, Cleveland, Whiting, Ind., St. Louis, Los Angeles, and Portland, Oreg. Recently, we made two shipments to Kobe, Japan.

In order to expedite our ores to market, we constructed at Stampede with our own equipment a 4,300-foot runway which is about the best private airport in the Territory. We have flown 300 tons of ore to the village of Nenana on the Alaska Railroad.

Transportation is, and will be for a long time, about the greatest hindrance to Alaska's progress.

And I will get that other information which you want.

Senator MALONE. I think you have made a good witness. And I think you have come down here a little mixed up because you have heard Congress and the executives talking about underdeveloped countries that we have to help before we help Alaska or any mountain country or North Carolina.

So, if I were you, in preparing this statement, I would confine myself to the industry and try to figure out something that will give this committee a good idea of what you are doing and what protection you need in the form of a tariff or a duty on a principle upon which you could invest money and let us have some idea of what it means in the increased cost of the end product or whatever antimony is used for.

I think you have made a good witness. We thank you and Mrs. Priester.

(Mr. Pilgrim subsequently submitted the following information:)

If there were a 5-cent-per-pound duty on antimony metal, ores, concentrates, and oxides and the proceeds were applied to maintain a domestic industry, it would encourage additional exploration. This would result in more efficient operation of mines with a probable reduction of cost. This could result in a production of 30 percent of domestic requirements.

This would not increase the cost of finished products in which antimony is used as much as 1 percent, and would result in the development of a stable industry available in emergency. This increase of production would mean an increase of domestic labor, surely a benefit to the Nation.

Mrs. PRIESTER. May I state that our miners have frequently referred to a 50-cent price per unit for a period of a number of years. There was a Government survey as to miners operating for only 2 years at this price, and the industry did not feel that the time for operation was long enough.

Senator MALONE. Well, I will tell you what my opinion is: You should have, from now on. And if you had a principle established by Congress, as the Constitution of the United States dictates, you can look forward to the end of your life.

Mrs. PRIESTER. We hope the Members of Congress will give this to us.

Senator MALONE. I have high hopes for it.

Mr. PILGRIM. May I say a few words on gold?

I heard these gentlemen here the other day, and I want to say something about gold in Alaska. In Alaska, gold mining, as you all know, has had a tough time of it, and the big gold producers there have had to continually pull in their lines, the areas which they originally figured were paying, and they originally laid out those areas to mine and, as the costs rose, they had to pull them in until, now, the end is in sight for the biggest company there, the United States Smelting & Refining Co. at Nome, Alaska.

There are some 300 Eskimos employed in the operation. They are fine people. They are good workers. There are no more intelligent people in the world. Those people have large families, and they are dependent on this company's operations.

They have moved in from villages, and they have adapted themselves to white man's ways of living. And, unless something is done for them, in about 5 or 6 years, we are going to have 1,200 to 1,500 Eskimos to take care of.

Senator MALONE. What has happened? Has inflation brought the costs up in the mines?

Canada has more sense than we have. They passed a law that they sell gold to us for $35. That is a good deal. We have no idea of doing anything like that. You may be interested in the two gold bills. Maybe you have seen them. I have. S. 175, that would allow the people of the United States to trade with gold, buy and sell, just like they do in other nations.

Then S. 1897, that would go back on a gold standard and standardize at whatever price it might be. Now, there are people that think you can go back on $35 gold. I don't know. I am not enough of an economist. But, at least, we ought to know what it is worth.

I think you are right about that. Of course, you have heard of the State Department's; it has been 3 or 4 times and will eventually pass if we shut down all the industry. That bill is to provide money from the taxpayers of America that, when an area is dried up, either mines or anything else, through the policy of free trade that we have adopted, then Congress would appropriate the money to retrain these workers in whatever industry it happens to be, and pay their fare to another area to go to work, and, also, compensate, to a certain extent, the stockholders of the company.

I spent 2½ months behind the Iron Curtain. And Russia has that policy; they don't need a congressional act; they send them someplace else or shoot them.

Mr. PILGRIM. Who would want to be transferred from Alaska to anywhere?

Senator MALONE. The particular thing is bringing you to that particular thing that the State Department has long advocated. If you bring in another statement, I think it would help.

Thank you, Mr. Pilgrim and Mrs. Priester.

Mr. PILGRIM. Thank you, Senator.

Mr. PRIESTER. Thank you, Senator.

Senator MALONE. The next witness is Mr. James E. Mack, of the Rolled Zinc Emergency Tariff Committee.

STATEMENT OF JAMES E. MACK, THE ROLLED ZINC EMERGENCY TARIFF COMMITTEE

Mr. MACK. Mr. Chairman, my name is James E. Mack. I am an attorney here in Washington, D. C., and appear as counsel of an industrial committee known as the Rolled Zinc Emergency Tariff Committee.

The companies comprising the committee are as follows:

Atlantic Zinc Works, 210 Van Brunt Street, Brooklyn, N. Y.

Ball Bros. Co., Inc., Muncie, Ind.

Edes Manufacturing Co., 1000 Water Street, Plymouth, Mass.

Illinois Zinc Co., 2959 West 47th Street, Chicago, Ill.

Imperial Type Metals Co., 3400 Aramingo Avenue, Philadelphia, Pa.

Matthiessen & Hegeler Zinc Co., La Salle, Ill.

Platt Bros. & Co., Post Office Box 1030, Waterbury, Conn.

These 7 companies, it is estimated, manufacture more than 90 percent of the rolled zinc produced in the United States.

Rolled-zinc products include zinc sheet, strip, rod, wire, and engraver's plates.

The Rolled Zinc Emergency Tariff Committee is confronted with tariff problems, and the purpose of my appearance is to summarize these problems in the belief that this information possibly might be of value to the committee in its study. Also, should the committee ultimately submit legislative recommendations to increase the import protection on lead and zinc, it is our desire to have our products included in any such legislation.

Senator MALONE. What is your problem, as far as the tariff is concerned, just briefly?

Mr. MACK. Our most critical problem at this time pertains to zinc sheets, on which there is a 1-cent-per-pound duty. On an ad valorem basis, that is equivalent to approximately 4 to 5 percent.

Senator MALONE. Have these products been the subject of trade agreements at all?

Mr. MACK. Yes, sir.

Senator MALONE. How?

Mr. MACK. There have been reductions in duty under the trade-agreements program.

Senator MALONE. How much?

Mr. MACK. Well, in the case of zinc strip, which is now 20 percent ad valorem—originally it was 45 percent—that also applies to zinc rods——

Senator MALONE. Did that come under the first 50-percent reduction provided in the 1934 Trade Agreements Act?

Mr. MACK. I would rather check it to give an exact answer. But I believe there have been successive reductions, sir.

Senator MALONE. All under the 1934 Trade Agreements Act?

Mr. MACK. Yes.

Senator MALONE. Was it bilateral through the State Department, or multilateral through Geneva? You can answer those questions and submit them later for the record.

Mr. MACK. I would prefer to do that, sir.

Senator MALONE. Could you give them to us tomorrow, so they could be included in the record?

Mr. MACK. I will try to, sir.

Senator MALONE. Now, this reduced duty is not enough to protect your industry; is that it?

Mr. MACK. That is right, sir. On zinc sheets, on which the duty is only 4 to 5 percent, if the duty should be increased on slab metal, which we feel is necessary in the interest of the domestic metal-mining industry——

Senator MALONE. You mean if you increased it?

Mr. MACK. That is right. If the President increases, following a Tariff Commission recommendation, you will then have a duty that is 2.1 percent per pound on slab metal. Aside from ruining us, it would invite importation of crudely rolled sheets. It could be brought in and then melted up in various ways and used for many purposes. It would be a genuine circumvention.

Now, I think it is fair to say that this problem became acute when it was decided that the lead-zinc industry would have to go the administrative route rather than the legislative route.

Senator MALONE. Now, what it would do, then, if the raw material got the relief, it would increase the price of the raw material to you, and your finished product would not be increased proportionately?

Mr. MACK. Yes, sir. Zinc sheets were in the bill when it was over at the House Ways and Means Committee last year, H. R. 8257. But then, as you know, a majority of the members of the committee determined that they should take the administrative rather than the legislative route. When this was done, the rolled-zinc products were included in the application which was filed at the Tariff Commission.

The Tariff Commission ruled that rolled zinc was a separate industry and, therefore, would have to be the subject of a separate application.

Accordingly, a separate application was filed. The Tariff Commission then ruled that the provision in the escape clause which provides for upward adjustments contingent on a threat of injury means a threat based on the current rate of import duties and not a threat in anticipation of an increase, even though many may feel it to be most likely.

And, therefore, they indicated that they would not be able to take favorable action on such an application.

Senator MALONE. Then under the present 1934 Trade Agreements Act, it does get a little complicated.

Mr. MACK. At best, sir.

Now, when H. R. 8257 was before the committee, Mr. Armstrong, Assistant Secretary of State, stated that the United States, if H. R. 8257 were enacted, would invoke article 28 of GATT.

Now, we are going to be hurt just as badly if the duty on the base metal is increased by administrative action, as if it were increased by legislative action. And since the State Department had committed itself to the use of article 28——

Senator MALONE. Article 28 of GATT then puts you right in the middle of the 36 foreign nations that work together on multilateral trade agreements?

Mr. MACK. As you know, article 28 was liberalized only in October of 1957. And the United States was one of the signatory nations. And since he had indicated—that is, the State Department had indi-

cated—that notice would be given under article 28, we felt that it was logical for article 28 to be used to withdraw the concession in the event the duty should be increased on lead and zinc by administrative action.

Senator MALONE. But we have gone rather far afield. The Constitution of the United States says that the Congress shall regulate the foreign trade, foreign commerce, and adjust the duties.

We have gone a good ways in putting that authority in Geneva under 36 foreign competitive nations, haven't we?

Mr. MACK. That is my opinion, sir; yes.

But I am here representing an industry group. And, therefore, conceivably some of them would have different opinions on that. But that is my personal viewpoint.

Senator MALONE. What is your purpose here? It is to get relief, isn't it?

Mr. MACK. Yes, sir. To explain the situation.

Senator MALONE. Well, then, if you want relief, wouldn't you like to explore the field?

Mr. MACK. Yes, sir.

Senator MALONE. Well, go ahead.

I don't see anything in your statement that would give you relief in the regular manner.

Mr. MACK. Well, I have covered what I was going to say in my statement—I have covered a good deal of that in our discussion here.

We would like to see this committee recommend to the Finance Committee or to the Senate when the trade agreements bill comes to the Senate in the event there is legislation or an amendment offered to the bill, which would provide increased import protection for the domestic zinc-mining industry—we would like to see our products included, because our products are made 100 percent from the base metal.

Senator MALONE. In other words, what you would like to have would be protection to keep you in business from foreign competition.

Mr. MACK. Yes, sir.

Senator MALONE. Do you understand if we didn't extend this 1934 Trade Agreements Act expiring in June and due notice was given to multilateral trade agreements nations, and bilateral too, that it reverts to the Tariff Commission and the Congress that your relief would be very simple?

Mr. MACK. I don't see that would necessarily solve our immediate problem.

Senator MALONE. Tell me why.

Mr. MACK. Because the Tariff Commission has ruled that the escape clause isn't available to us——

Senator MALONE. We have no escape clause if you don't extend it.

Mr. MACK. Is not the escape clause permanent legislation?

Senator MALONE. No, it is not. It is in the 1934 Trade Agreements Act as amended. And when it expires, it expires. I think we have the country entirely mixed up so nobody knows what we are talking about, even a lawyer.

Mr. MACK. Well, we have this very definite problem.

Senator MALONE. If this went back to the Congress under the statutory tariffs which you had before the 1934 Trade Agreements Act,

and then the Tariff Commission on its own motion or application by your company or producers or a customer could examine it and raise or lower the tariff to make the difference between the effective wages and taxes and cost of doing business here and the cheaper competing nations, wouldn't you be getting close to the subject?

Mr. MACK. I think so, Senator.

Senator MALONE. I shall furnish you, if you will ask my office, with a letter from the Tariff Commission that outlines exactly what I have tried to tell you, and a copy of section 3336 of the 1934 tariff law.

Mr. MACK. The equalization in the difference of the cost of production?

Senator MALONE. That is right. That is exactly what it says. Between this Nation and the cheaper competing nations.

Mr. MACK. I am familiar with that section, sir.

Senator MALONE. If that applied, would you be pretty close to the answer?

Mr. MACK. Yes, sir.

Senator MALONE. What do you mean? You have differences of opinion among these people?

Mr. MACK. I don't know that they have differences of opinion, but——

Senator MALONE. Why don't you find out?

Mr. MACK. The differences of opinion on the question of every aspect of the trade agreements program——

Senator MALONE. It would just return to the Constitution of the United States under which protection was furnished on that basis. You see, 60 percent of dollar value of our imports never had a tariff, because it was not important. Because the 40 percent that had the protection like your industry which did have the protection for a 150 years, it was on that basis. Under the 1930 act it specifically lays down the method. But has never been operative since the 1934 act. But if it is allowed to expire, if Congress just sits still and doesn't vote for anything, and it expires on June 30, you are back in business, aren't you?

Mr. MACK. It would seem that you would be, sir.

Senator MALONE. Well, I should think it would be a good idea for you to take that up with your people and let them know what is happening down there.

We had a thousand people in here under the direction of Eric Johnston, a great director, to scare Congress into an extension of it. Do you think that is going to help?

Mr. MACK. No, sir.

Senator MALONE. I don't either.

All right. Go ahead.

Mr. MACK. Well, if my statement could just be printed in the record, I think that would take care of it.

Senator MALONE. It will be printed in the record at this time.

And you have the permission of this committee to submit a further statement.

Mr. MACK. Well, our recommendation is this, Senator: Unless and irrespective of the overall trade agreements program, unless the Tariff Commission recommends and the President increases the duties on lead and zinc to the maximum permissible and the State Depart-

ment—or I should say the President—takes steps to invoke article 28 to protect the domestic rolled zinc industry, we would favor an amendment to the Trade Agreements Act if extended at all which would provide an increase in the duty on zinc concentrate and zinc metal, plus an additional amount for our manufacturing operations.

Senator MALONE. Yes, I get your idea exactly.

I think it would be well if you studied this subject a little more. The country is entirely mixed up. Congress is mixed up.

Many think it comes back automatically to the congressional committees and they would hold hearings on these products. It does not. It comes back to the Tariff Commission under the 1930 act.

And as far as the escape clause, no one has ever escaped, we have noticed. And the peril point is only where the tariff ought to be, and immediately the cheap competing countries juggle the price of the dollar. So, there is no way to get out of it.

Mr. MACK. I have section 336. I am familiar with that.

Senator MALONE. It is very plain and clear. And if you would take it up with your people, I think the way it is now you are dead. It is too complicated. You are not likely to get much relief. I am talking about the history of it.

Mr. MACK. Yes, sir. We are very aware of the history.

Senator MALONE. My heart goes out to anyone trying to stay in business under the present situation.

Mr. MACK. One other suggestion that we made:

The chairman of our committee in testimony before the Ways and Means Committee, which I would like to mention here recommended that if the Trade Agreements Act were to be extended, that provision be included authorizing the Tariff Commission to consider related industries in an escape-clause action such as ours.

Senator MALONE. I think it is a good suggestion.

Now, you will no doubt come before the Senate Finance Committee when it comes over to us. And I thank you very kindly.

I think you have made a good witness. I think, however, you could study it and make a little clearer recommendation as to what you would like to see done.

(The prepared statement of Mr. Mack is as follows:)

PREPARED STATEMENT OF JAMES E. MACK IN BEHALF OF THE ROLLED ZINC EMERGENCY TARIFF COMMITTEE

Mr. Chairman, my name is James E. Mack. I am an attorney here in Washington, D. C., and appear as counsel of an industrial committee known as the Rolled Zinc Emergency Tariff Committee. The companies comprising the committee are as follows:

Atlantic Zinc Works, 210 Van Brunt Street, Brooklyn, N. Y.
Ball Bros. Co., Inc., Muncie Ind.
Edes Manufacturing Co., 1000 Water Street, Plymouth, Mass.
Illinois Zinc Co., 2959 West 47th Street, Chicago, Ill.
Imperial Type Metals Co., 3400 Aramingo Avenue, Philadelphia, Pa.
Matthiessen & Hegeler Zinc Co., La Salle, Ill.
Platt Bros. & Co., Post Office Box 1030, Waterbury, Conn.

These 7 companies, it is estimated, manufacture more than 90 percent of the rolled zinc produced in the United States.

Rolled zinc products include zinc sheet, strip, rod, wire, and engraver's plates.

The Rolled Zinc Emergency Tariff Committee is confronted with tariff problems and the purpose of my appearance is to summarize these problems in the belief that this information possibly might be of value to the committee in its study. Also should the committee ultimately submit legislative recommendations

to increase the import protection on lead and zinc it is our desire to have our products included in any such legislation.

To help you understand our problems, I shall make a brief statement indicating the nature of the rolled zinc industry. The zinc rolling companies start with zinc metal in slab form that is usually 99 plus percent pure zinc. This metal is melted, cast into molds of a desired size and shape and then rolled into strip that may be wound into long coils or rolled into sheets that may be stretched, leveled, polished, ground, or otherwise treated and then trimmed to very exact dimensions. The zinc sheets, plates, and strip which result from these processes are used for making engraver's plates, lithographic plates, weatherstrip, terrazzo strip, identification tags, termite protective sheeting, flashing, gutters, mailbag grommets, drawn zinc battery cans for dry-cell batteries, condenser cans and many other items.

All of the facilities that are required for the rolling of zinc are available today in the Netherlands, West Germany, Belgium, Italy, France, and Great Britain. Some of these facilities, on a very small scale are available in Canada and Mexico.

The Rolled Zinc Emergency Tariff Committee has supported the efforts of the lead and zinc mining industry to obtain increased import protection. As purchasers of basic zinc metal naturally we are not seeking a high price on what we buy. Nevertheless, we recognize that if the domestic mining industry is to be preserved, which we believe to be imperative, then we are convinced that substantial increased import protection must be forthcoming.

Notwithstanding our support of increased import protection for basic zinc metal it is fair to state that the most critical tariff problem with which we are presently confronted began when H. R. 8257 was introduced in the House of Representatives last year. This bill proposed to enact part of the administration's long range metals program into law, and, specifically it proposed to raise the duties on imports of zinc concentrate, zinc in slab form, zinc sheets, and other enumerated items. Administrative divisions of the Government sent representatives to testify before the House Ways and Means Committee in favor of enactment of H. R. 8257. I want particularly to point out that the Honorable Willis C. Armstrong, Assistant Secretary of State for Economic Affairs, stated, when he testified before the Ways and Means Committee on August 1, 1957, that the administration favored enactment of H. R. 8257 and the giving of notice to the foreign countries in accordance with article 28 of the General Agreement on Tariffs and Trade. You know what happened. A majority of the Ways and Means Committee held that administrative remedies should be pursued before making use of extraordinary legislation.

Accordingly the lead and zinc industries filed an application with the United States Tariff Commission and requested relief under the escape clause. This application included rolled zinc strip, rod and wire, as well as sheet and plate. The Tariff Commission ruled that the rolled zinc products constituted a separate industry and that therefore, these products could not be included in the same escape-clause action. When we learned of this we prepared and filed a separate escape-clause application for the same rolled zinc products. The Tariff Commission ruled, however, that the language of the escape-clause provision would not authorize the Commission to recommend increased duties on rolled zinc products even though they might recommend an increase on slab metal duty that would make the duty on slab metal higher—by 100 percent—than the duty on the same metal in sheet form or plate form. In effect they told us that according to present rules our industry would have to wait until the increased duty on slab metal actually created sufficient imports of foreign rolled zinc products before section 7 could be used for our protection.

In other words, the Commission ruled that the language of the escape-clause provision which authorizes increased import protection when there is a threat of serious injury to the dometic industry means a threat based on the then current rate of import duties and not a threat which exists because of an anticipated governmental action which would cause the injury.

Upon careful reflection we felt that there was one administrative remedy still open to us, and only one. The same article 28 which Mr. Armstrong stated the administration would use to prevent abrogation of our international commitments should the tariff be increased by legislative action could be used to accomplish the same purpose if the tariff on basic zinc metal should be changed by administrative action. Accordingly our group filed on November 22, 1957, an application asking for relief under article 28 of the General Agreement on Tariffs

and Trade. We felt that our situation met the special circumstances requirement of article 28. We submit the following points to substantiate that belief:

(1) Certain rolled zinc products were included in the administration bill in 1957 (H. R. 8257) to provide increased import protection to the domestic zinc industry.

(2) The Honorable Willis C. Armstrong in urging passage of the bill before the Ways and Means Committee on August 1, 1957, in effect recognized the principle that if the import protection should be increased on basic zinc metal that there should be a proportionate increase on certain rolled zinc products.

(3) The principle having been adopted that there should be a simultaneous increase on certain rolled zinc products with any increase placed into effect on basic zinc metal, it necessarily follows that the domestic rolled zinc industry will be injured just as severely and as quickly if the import protection on basic zinc metal should be increased by an administrative action rather than a legislative one without a simultaneous increase in the import protection on rolled zinc products.

(4) The domestic rolled zinc industry sought to avail itself of the same escape-clause remedy as employed by the domestic mining industry but the Tariff Commission, while sympathetic to the problem, ruled that the law would not permit favorable escape-clause action on rolled zinc products because of a threat to the industry of injury which would occur when the import protection should be increased on basic zinc metal.

(5) Article 28 of GATT had been liberalized only in October 1957 and the United States was one of the signatory nations to the modified agreement.

(6) Canada is in the process of using article 28 against the United States on certain zinc products which would further suggest the desirability of negotiating the matter in connection with the withdrawal of concessions by Canada.

(7) Paragraph 5 of article 28 provided for the giving of notice to foreign countries prior to January 1, 1958, of reservation of the right to withdraw specified concessions during the next 3 year binding period which commenced January 1, 1958. We were of the opinion that judicious administration dictated the giving of this notice, which notice, of course, could have been withdrawn in the event the Tariff Commission should not have recommended an increase in the import protection on basic zinc metal, just as it is understood that notice was given when H. R. 8257 was under consideration last year and the notice subsequently withdrawn when Congress did not pass the bill.

To date we have no definite report of action on our application, no favorable action, no unfavorable action. In conferences with several administrative leaders we have been given encouragement but to date nobody has told us what procedures would be required, and we are fearful that since there has been no announced program for giving us the simultaneous and compensatory relief that there could be a difference in time which could work great hardship on our industry.

The entire story of zinc price and zinc duty is set out in a table which we hereby submit. We hope this makes the real situation clear. This table shows each change of duty on certain items since January 1, 1939. On the line identified by the date of change we show the published market price as of that date, the new rate of duty and we have expressed the duty as a percent of the price. We have shown this for zinc concentrate (published as a per ton price for 60 percent content but stated here on the value of each pound of metal) slab metal, zinc strip, and zinc sheets uncoated.

We invite careful study of this table. It shows that our effective duty rate on concentrate as of January 1, 1939, was 50 percent of value. This has been reduced to 12.8 percent. Is it hard to understand why foreign concentrates now take a larger share of the market? If the escape-clause petition results in maximum relief this will, by our table, go back up to 38.4 percent which is still well below the 1939 level.

On slab metal the January 1, 1939, effective duty rate was 33.7 percent, now 7 percent. To us looking at this we cannot be surprised by the size of present imports. Present activity with the Tariff Commission may result in raising this back to 21 percent.

Now compare the resulting rate of effective duty on slab metal with the duty on sheets, and you will see why we are so concerned. Not only do we stand to lose our sheet business to foreign operators who already undersell us, but this anomaly will encourage the importation of galvanizing metal, metal for making brass, for die casting in the form of crudely rolled sheets at a duty of 1 cent per pound versus 2.1 cents per pound on the same metal in slab form. This will

shortly ruin the zinc rollers and will directly injure the miners and smelters that everyone claims they are trying to help.

With this much of a recitation of the problem and the steps we have gone through to try to meet the problem let me now present a capsule statement of our position:

1. When H. R. 8257 was introduced—a bill that would increase the duty on zinc concentrate, zinc in slab form and zinc rolled sheets—we did not oppose it. We did try to point out that it did not give compensatory treatment for some rolled zinc products.

2. When the Ways and Means Committee determined that it would be better for the lead and zinc industry to go the administrative route rather than the legislative route, we did not foresee the difficulties this would compound for the zinc rollers. We anticipated that if the lead and zinc industry filed a petition with the Tariff Commission for escape-clause action the Tariff Commission would review the facts and if they found that the zinc rollers had merit in their case they would recommend simultaneous and compensatory adjustments in the duties on rolled zinc products.

3. We have learned to our sorrow that the escape clause does not permit the Tariff Commission to recommend simultaneous and compensatory adjustment to a segment of an industry that is not then experiencing serious injury from imports.

4. When we learned that the Tariff Commission could not consider giving our products simultaneous treatment along with the basic zinc industry we searched out and found that article XXVIII, which had been cited by a representative of the State Department at a hearing before the House Ways and Means Committee, was a possible avenue of relief for us and that this avenue presumably would permit simultaneous and compensatory adjustment by executive action. We immediately therefore filed an application on November 22, 1957, or a little more than 4 months ago, requesting action under article XXVIII. To date we have not been able to get a precise statement as to what action will be taken to protect the zinc rollers if the duty on their raw materials should be increased and their cost should therefore be increased and they should be put at a greater disadvantage with foreign competitors.

We have no doubt that other segments of other industries have been or will be placed in situations similar to the one that the present section 7 action on lead and zinc creates for the domestic zinc rollers. Section 7 is denied them unless it be amended. Article XXVIII appears to be a possible answer, but as you gentlemen know, as article XXVII now stands, the United States never has used it for such purpose. We believe this refutes the oft-mentioned claim that the Trade Agreements Act does offer adequate safeguards for United States industry. This point should certainly be resolved before the act be extended for 5 years. We are making three specific recommendations.

1. Grant the Tariff Commission authority to examine related industries in escape-clause actions and to recommend simultaneous and compensatory action when the Commission finds that adjustments recommended under escape-clause procedures will injure related businesses that otherwise would have no escape-clause redress.

2. Amend article XXVIII to specifically provide for cases similar to ours and to spell out procedures, time required, etc.

3. In the event it be determined to seek additional import protection for the domestic zinc mining industry by means of legislation, either by an amendment to the Trade Agreements Extension Act when that measure reaches the Senate or by special legislation at a later date, it is the desire of rolled zinc manufacturers to be included in any such legislation. This is important inasmuch as our products are manufactured almost 100 percent from the base metal. In this connection, we would like to suggest a formula for determining the proper import duty on rolled zinc products. This would be a specific duty equivalent to the duty on slab metal plus 20 percent ad valorem. At present the duty on uncoated zinc sheets is 1 cent per pound which is equivalent to only 4 to 5 percent ad valorem; the duty on zinc wire is 11 percent ad valorem; and the duty on zinc strip and zinc rod is 20 percent ad valorem (to be reduced to 19 percent after June 30, 1958). Even without any increase in duty on the basic zinc metal the existing duty on zinc sheets is entirely inadequate. Should the duty on the basic zinc metal be increased the present protection on the other rolled zinc products also would be entirely inadequate unless there are appropriate upward adjustments in the duties on these items.

We shall be most grateful for your careful consideration of our problems and recommendations.

TABLE I.—*Showing prices, tariff rate, and percent tariff to price 1939–58, rolled zinc and raw materials*

Date	Concentrate	Metal	Strip	Sheet
Jan. 1, 1939, Canadian tariff agreement.	2.41 cents price, 1.20 duty, 50 percent duty.	4.15 cents per pound price, 1.40 cents per pound duty, 33.7 percent duty.	9.25 cents per pound price, 4.16 cents per pound duty, 45 percent duty ad valorem.	9.75 cents price, 2 cents per pound duty, 22.6 percent.
Jan. 1, 1948, Geneva agreement.	6.15 cents per pound price, 0.75 cent per pound duty, 12.2 percent duty.	10.50 cents price, 0.875 cent per pound duty, 8.35 percent duty.	14.50 cents per pound price, 3.26 cents per pound duty, 22½ percent ad valorem.	15.50 cents per pound price, 1 cent per pound duty, 6.45 percent duty.
June 6, 1951, Torquay agreement.	8.16 cents per pound price, 0.60 cent per pound duty, 7.35 percent duty.	14.50 cents per pound price, 0.70 cent per pound duty, 4.82 percent duty.	19.50 cents per pound price, 4.38 cents per pound duty, 22½ percent ad valorem.	24.50 cents per pound price, 1 cent per pound duty, 4.16 percent duty.
Jan. 1, 1955, base point for 1956, Geneva agreement.	5.66 cents per pound price, 0.60 cent per pound duty, 11.6 percent duty.	11.50 cents per pound price, 0.70 cent per pound duty, 6.09 percent duty.	19.75 cents per pound price, 4.45 cents per pound duty, 22½ percent ad valorem.	23 cents per pound price, 1 cent per pound duty, 4.35 percent duty.
June 30, 1956, 1st stage Geneva 1956 agreement.	7 cents per pound, price 0.60 cent per pound duty, 8.6 percent duty.	13.50 cents per pound price, 0.70 cent per pound duty, 5.19 percent duty.	21.50 cents per pound price, 4.71 cents per pound duty, 21 percent ad valorem.	24 cents per pound price, 1 cent per pound duty, 4.16 percent duty
June 30, 1957, 2d stage 1956 Geneva agreement.	4.67 cents per pound price, 0.60 cent per pound duty, 12.8 percent duty.	10.50 cents per pound price, 0.70 cent per pound duty, 6.65 percent duty.	21.50 cents per pound price, 4.3 cents per pound duty, 20 percent ad valorem.	24 cents per pound price, 1 cent per pound duty, 4.16 percent duty.
Present, March 1958	4.67 cents per pound price, 0.60 cent per pound duty, 12.8 percent duty.	10 cents per pound price, 0.70 cent per pound duty, 7 percent duty.	20.50 cents per pound price, 4.1 cents per pound duty, 20 percent ad valorem.	24 cents per pound price, 1 cent per pound duty, 4.16 percent duty.
June 30, 1958, 3d stage 1956 Geneva agreement.	(?) price, (?) duty, (?) percent.	(?) price, (?) duty, (?) percent.	(?) price, (?) duty, 19 percent duty ad valorem.	(?) price, 1 cent duty, (?) percent duty.

Following figures assume that Tariff Commission recommends and the President orders maximum increases in duties on zinc concentrates and metal and that these are effective June 30, 1958, and that no other factors are changed:

Date	Concentrate	Metal	Strip	Sheet
June 30, 1958	4.67 cents per pound price, 1.8 cents per pound duty, 38.4 percent duty.	10 cents per pound price, 2.1 cents per pound duty, 21 percent duty.	20.5 cents per pound price, 3.9 cents per pound duty, 19 percent duty ad valorem.	24 cents per pound price, 1 cent per pound duty, 4.16 percent duty.

Senator MALONE. We will stand in recess until 10 o'clock tomorrow morning.

(Whereupon, at 4:35 p. m., the committee recessed to reconvene at 10 a. m. March 27, 1958.)

LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

THURSDAY, MARCH 27, 1958

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in room 224, Senate Office Building, Hon. Frank Church presiding.

Present: Senator Carroll.

Also present: Senators Church and Allott.

Staff members present: Robert W. Redwine, assistant counsel to the committee, and George B. Holderer, staff engineer.

Senator CHURCH. The hearing will come to order.

Mr. Redwine of the committee staff has some introductory remarks to make this morning.

Mr. REDWINE. Mr. Chairman, there was considerable discussion yesterday afternoon on S. 3537. Inadvertently, I failed to ask permission for that to go in the transcript. I would like at this time to ask permission for it to appear in the printed record at the proper place.

Senator CHURCH. Permission is granted.

Mr. REDWINE. Mr. Chairman, during the day there will be a witness who will testify in respect to S. 3199, which our chairman introduced, and S. 3315. May those two bills appear in the transcript at this time?

Senator CHURCH. Yes; the two bills will appear separately in the transcript.

Mr. REDWINE. Mr. Chairman, I understand that the chairman is proposing an amendment in respect to these two bills.

Senator CHURCH. Yes.

Actually, the Senate bill 3315 was introduced on February 19 by Mr. Bible and by Mr. Murray of this committee, and S. 3199 was introduced by me on January 27, 1958. S. 3315 provides for a moratorium in the assessment work on unpatented mining claims of 1 year, and S. 3199 provides that the date for the assessment work should be changed from the 1st day of July until the 15th day of August. Subsequently, that date has been changed to the 1st day of October, and, as changed, I would like to amend S. 3315 by adding this provision in the form of an amendment so that the two bills can be combined, and it is my understanding that this has been the concept and has been agreed to by both Mr. Bible and Mr. Murray.

Mr. REDWINE. That is my understanding, Mr. Chairman.

Senator CHURCH. So the text of the original two bills and the revised text of the amendment to be added to S. 3315 should all be included in the record at this point.

(The bills and the amendment referred to are as follows:)

[S. 3199, 85th Cong., 2d sess.]

A BILL To amend section 2324 of the Revised Statutes, as amended, to change the period for doing annual assessment work on unpatented mineral claims so that it will run from August 15 of one year to August 15 of the succeeding year, and to make such change effective with respect to the assessment work year commencing in 1959

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 2324 of the Revised Statutes, as amended (30 U. S. C. 28), is amended by striking out "1st day of July" and inserting in lieu thereof "15th day of August".

SEC. 2. Notwithstanding the amendment made by the first section of this Act, the period commencing in 1957 for the performance of annual assessment work under section 2324 of the Revised Statutes, as amended, shall end at 12 o'clock meridian on the 1st day of July, 1958, and the period commencing in 1958 for the performance of such annual assessment work shall commence at 12 o'clock meridian on the 1st day of July, 1958, and shall continue to 12 o'clock meridian on August 15, 1959.

[S. 3315, 85th Cong., 2d sess.]

A BILL To provide for the suspension of annual assessment work for the year ending July 1, 1958, with respect to mining claims held by location in the United States, including the Territory of Alaska

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the provision of section 2324 of the Revised Statutes of the United States which requires that on each mining claim located after May 10, 1872, and until a patent has been issued therefor, not less than $100 of labor shall be performed or improvements made during each year, shall be suspended as to any such mining claim during the year beginning at 12 o'clock meridian July 1, 1957, and ending at 12 o'clock meridian July 1, 1958, if the claimant of such mining claim shall file, or cause to be filed, in the office where the location notice or certificate is recorded, on or before 12 o'clock meridian July 1, 1958, a notice of his desire to hold such mining claim.

Amendment intended to be proposed by Mr. Church to the bill (S. 3315) viz:

At the end of line 2 after the enacting clause insert:

"That section 2324 of the Revised Statutes, as amended (30 U. S. C. 28), is amended by striking out '1st day of July' and inserting in lieu thereof '1st day of October'.

"SEC. 2. Notwithstanding the amendment made by the first section of this Act, the period commencing in 1957 for the performance of annual assessment work under section 2324 of the Revised Statutes, as amended, shall end at 12 o'clock meridian on the 1st day of July, 1958, and the period commencing in 1958 for the performance of such annual assessment work shall commence at 12 o'clock meridian on the 1st day of July, 1958, and shall continue to 12 o'clock meridian on the 1st day of October, 1959."

On line 3, prior to the word "That", insert "section 3".

Mr. REDWINE. Mr. Chairman, in respect to the matter just under discussion, we have in the committee files numerous letters, and it has been asked that they appear in the record. May we insert them in the printed record?

Senator CHURCH. I would like that. I know that I myself have received a number of letters, and I think I referred them all to the committee. I would like to have them included in the record in support of the purpose of these two measures.

(The communications referred to follow:)

GENERAL MINES CORP.,
Spokane, Wash., March 3, 1958.

Hon. FRANK CHURCH,
Senate Office Building,
Washington, D. C.

DEAR SENATOR: The Wallace Miner indicates that you have introduced in Congress a bill to suspend mine assessment work for 1958 on unpatented mining claims.

We are heartily in favor of this bill, and also for changing the period to start assessment work on claims from July 1 to August 15. This would be a great help for those who have holdings in the interior of Idaho. The facts are my associates have holdings in the extreme eastern part of Shoshone County, Idaho, 35 miles south of Superior, Mont. Last year the snow on the road was 12 feet deep on July 10. To be on the premises necessitated using snowshoes.

It has been difficult for us to raise funds through the sale of stock, and it would be necessary to levy an assessment which would impair the investment for the share owners who would be unable to pay.

Some of our directors terminated their residence in Idaho several years ago, but have extensive property holdings in Idaho.

We wish you success in your efforts to help us in our mining activities.

Very truly yours,

H. G. LOOP, *President.*

GENERAL MINES CORP.,
Spokane, Wash., March 11, 1958.

Senator FRANK CHURCH,
Senate Office Building,
Washington, D. C.

DEAR SENATOR CHURCH: Reports from Washington, D. C. indicate that you are sponsoring a bill which you have introduced in Congress to suspend assessment work for the year ending July 1, 1958, on unpatented mining claims, and another bill to change the period for doing assessment work from July 1 to August 15 of each year.

We are greatly in favor of this legislation, and hope you succeed in your efforts in having your bills passed. It would be a great help to us at this time when our funds are exhausted. To raise funds through the sale of stock is impossible at present. If an assessment was levied many share owners would be unable to meet their obligation and lose their holdings.

My investments in industries and mining are all in Idaho of which State the writer has been a citizen for the past 35 years.

Wishing you success in your effort to help us in our mining activities.

Very truly yours,

C. ROHOLT, *Vice President.*

AMERICAN URANIUM CORP.,
Albuquerque, N. Mex., March 4, 1958.

Hon. FRANK CHURCH,
United States Senator from Idaho,
Senate Office Building, Washington, D. C.

DEAR SENATOR CHURCH: I want to express my appreciation to you for cosponsoring the bill introduced by Senator Bible for suspending for 1 year the requirements that owners of mining claims do $100 worth of labor on each claim.

As president of American Uranium Corp. and Colorado Mines & Metals Co., who own mining claims in New Mexico, Colorado, Arizona, and Utah, we are very much interested in the passing of this bill as our companies have been hard hit with the low price of copper, lead, and zinc, and the bad position the uranium market is in.

With high esteem, I remain,

Yours very truly,

E. T. CHASE, *President.*

KELLOGG, IDAHO, *March 12, 1958.*

Hon. FRANK CHURCH,
Senator from Idaho,
Washington, D. C.

DEAR SENATOR CHURCH: The holders of mining claims, particularly the prospectors all over the district are mighty pleased with your efforts to secure the change in the date for the performance of the annual labor on unpatented mining claims from July 1 to October 1. Some of these claims are back in the hills and at elevations where it is impossible to get into before the 1st of July.

Also, due to economic conditions in the mining district at this time, it would be of great benefit to us should the assessment work be suspended this year with only a declaration of intention to hold to be filed.

With very best wishes, I am,

Sincerely,

ALBERT M. NASH.

IDAHO MINING ASSOCIATION,
Boise, Idaho, February 26, 1958.

Hon. FRANK CHURCH,
Senator from Idaho,
Washington, D. C.

DEAR SENATOR CHURCH: At the Sun Valley meeting, July 15 and 16, 1957, a resolution was adopted which instructed Mr. Wallace G. Woolf, president of the Idaho Mining Association, to appoint a committee consisting of representatives from the following professions; law, mining, and geology, with instructions to make a study and report their findings. The committee's report is enclosed.

Of recent date, two State supreme courts have rendered opposite opinions on the use of the new scientific methods of discovery. The Wyoming Supreme Court says it is unlawful to claim discovery by geiger counters. The Utah Supreme Court has recently held that there can be legal discovery by geiger counters. (*Rummell* v. *Bailey* (320 Pac. (2d) 653)).

With this difference of opinion by the two State supreme courts, it all the more justifies an act of Congress such that has been suggested and set up in section I, of the proposed act.

The officers and directors of the Idaho Mining Association have instructed their secretary to circulate to our members of Congress, western governors, and all the mining associations, the committee's report.

This office would appreciate hearing any comments you may care to make regarding this proposed act.

Yours very truly,

HARRY W. MARSH, *Secretary.*

REPORT OF COMMITTEE ON MINING CLAIM LAWS

IDAHO MINING ASSOCIATION,
Wallace, Idaho, February 27, 1958.

Mr. WALLACE G. WOOLF,
President, Idaho Mining Association,
Kellogg, Idaho.

DEAR MR. WOOLF: We, your committee, appointed pursuant to a resolution passed by the Idaho Mining Association at its meeting at Sun Valley, Idaho, on July 14, 1957, recommending you appoint a committee consisting of representatives of the following professions: law, mining and geology, with instructions to make a study and report on the extent to which the cost of modern geophysical and geochemical techniques and other scientific advancements may be applied to location work, annual assessment, and expenditures required for patents and the feasibility of amending the mineral laws to provide for the same, report as follows:

Attached hereto are our recommendations and suggestions for changes in and additions to the mining laws of the United States relative to the above subject matter.

While we have placed these in the form of a congressional act we are not certain whether all the changes should be contained in a bill already introduced such as Senator Bible's S. 2039 or that they should be embodied in one act or

more than one act. This is a matter that can easily be determined by the draftsmen of the competent congressional committee. We have the following suggestions with regard to the attached recommendations labeled "An Act":

Section 1. Discovery: The purpose of this section is to enable a prospector to make a discovery by the use of the most modern means. We believe this provision should be enacted into law to meet the situation created by a case decided by the Supreme Court of Wyoming on November 19, 1957; in the case of *Globe Mining Company* v. *Anderson* (reported in 318 Pac. 2d 373), the court held a legal discovery could not be had from the readings of electrical instruments such as scintillation and geiger counters. There has become embodied in the law relating to discovery a general rule that to constitute a valuable discovery upon a claim for which patent is sought there must be actually and physically exposed within the limits thereof mineral bearing rock in place possessing within itself a present or prospective value for mining purposes, and usually it is held that to constitute a discovery of a lode claim minerals must have been found in place and the evidence be of such a character that a person of ordinary prudence would have been justified in the further expenditure of his labor and means, with a reasonable prospect of success, in developing a valuable mine.

It will be noted that under the proposed section the new method of discovery permitted by it will hold a claim for only 5 years and a relocation using the new method will not be permitted. The purpose of these provisions is to prevent the tying up of properties for long periods of time without actual digging or drilling.

Section 2. Application to annual labor: This section has been copied from Senator Bible's bill, S. 2039, and the Senate Committee Report No. 608, dated July 11, 1957, covers this portion of our proposal.

Section 3. The filing of an affidavit or sworn statement: We appreciate that under the Federal law, the location, manner of recording and the location work required to hold a mining claim is left largely to the laws of the States, except only that the Act of Congress requires that not less than $100 worth of labor shall be performed or improvements made during each year. In this regard the abovementioned Senate committee report contains the following:

"The committee, recognizing that abuses might be made by unscrupulous persons, strongly recommends that the Department of the Interior, through its public relations with the various State legislatures, urge such legislatures, in enactment of legislation effectuating this recognition of geological, geochemical, and geophysical surveys in the determination of ore bodies, and/or mineral deposits, shall clearly define the meaning of 'credited technicians' and 'generally recognized equipment and methods.'

"It is further strongly recommended to the Department of the Interior that it shall, in its relationships with the States, impress upon the States that this new field of exploration, with rapidly developing concepts and that they should keep pace with developments in this field.

"It is further suggested that the States may wish to amend existing laws, or enact new legislation dealing with the filing of affidavits as to the performance of annual assessment work which would take into consideration the new methods of prospecting delineated in this bill, and provide in such legislation a requirement that the mining claimant set forth the amount of work performed, the nature of the work performed, and the time in which performed. The enactment of such legislation by the States would prevent the filing of fraudulent statements."

We believe that section 3 of the attached affords protection against some of the frauds that may be committed and we are further of the opinion that Congress has the right to place these protective restrictions around what constitutes a discovery and the performance of annual assessment work.

Section 4. The application of the cost of a United States mineral survey to the $500 worth of work or improvements required before a patent can issue: We are of the opinion that it is to the interest of the mining industry and the United States to encourage United States mineral surveys and that the application of the cost of a mineral survey not only to the annual assessment work but to the labor or improvements required before a patent can issue will encourage the making of mineral surveys. This is accomplished, we believe, by section 4.

So far as we know Idaho is the only State or Territory having a law authorizing the application of the cost of a patent survey to annual labor or assessment work (secs. 47–618 and 47–619, Idaho Code), but owing to the conflicting deci-

sions there is some doubt as to whether under the existing acts of Congress said act is legal.

The history of this type of legislation is as follows: In 1915 the Territorial Legislature of Alaska passed an act permitting the application of the cost of a mineral survey to annual assessment work. In 1928 this statute was contested in the Federal courts in the case of *Wigand* v. *Byrnes* (24 Fed. 2d 179). The claim therein involved was a placer, the cost of the survey was $60, and the holder of the claim had done $40 worth of additional work. It was contended that the Alaska statute was contrary to the Federal statute and therefore void. The Circuit Court of Appeals for the Ninth Circuit upheld the Alaska statute and held that the cost of a patent survey was applicable to annual assessment work. The case was one that might be termed a "hardship" case and perhaps the holding is not applicable to the situations generally encountered. Later this matter was submitted to the Secretary of the Interior on two points:

(1) Would the Department count as assessment work a patent survey?

(2) Could the cost of a patent survey be applied upon the requirement of the expenditure of $500 in the case of an application for patent?

On February 15, 1929, Secretary West ruled that the Department would not consider a patent survey as assessment work and would not count it is applicable to the expenditure of $500 on labor or improvements in the case of a patent application (52 L. D. 561).

Section 5. Supplemental legislation by the States: As will be seen from the above-quoted portion of the committee report which had under consideration Senator Bible's bill, S. 2039, the various States are requested to supplement the Federal act, and we believe section 5 of the enclosed is consistent with the admonition of the committee.

Respectfully submitted.

HENRY L. DAY.
ROGER H. MCCONNEL.
OSCAR W. WORTHWINE.

AN ACT To clarify the requirements with respect to a discovery and the performance of labor as a condition of holding mining claims on Federal lands pending the issuance of patent therefor, and making applicable thereto the cost of a United States mineral suvey, and validating certain lode locations

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. That there be added to section 2320 of the Revised Statutes of the United States (30 U. S. C. 23) the following:

"A discovery may be made as heretofore defined by law and subject to proper enactment by the legislatures of the respective States and Territories, as required in section 5 of this Act, a discovery may also be made by geological, geochemical, or geophysical surveys made by credited technicians employing generally recognized equipment and methods, or other recognized means of determining the existence, extent of concentration, or accessibility of minerals, but a discovery by this latter method shall not enable the claimant to hold a claim for more than five years from the date of discovery unless within said five years a discovery is made as heretofore defined by law. During or after the five-year period the locator, his heirs or assigns, cannot relocate the same ground except by making a discovery as heretofore defined by law."

SEC. 2. That section 2324 of the Revised Statutes of the United States (30 U. S. C. 28) be amended by inserting immediately after the third sentence thereof the following new sentence:

"The term 'labor', as used in the preceding sentence, shall include, but not be limited to, geological, geochemical, or geophysical surveys made by credited technicians employing generally recognized equipment and methods, or other recognized means of determining the existence, extent of concentration, or accessibility of minerals on the claim."

SEC. 3. That before the geological, geochemical, or geophysical surveys or other recognized methods of determining the existence, extent of concentration, or accessibility of minerals shall apply to a discovery under section 2320 of the Revised Statutes of the United States (30 U. S. C. 23), or on annual labor or improvements under section 2324 of the Revised Statutes of the United States (30 U. S. C. 28), the owner of the claim, or someone on his behalf, shall file in the proper local recording office of the subdivision of the State or Territory where certificates of location and affidavits of the performance of annual labor are filed according to law, an affidavit or sworn statement of the locator, owner, or

his or their agent, stating the date of such work, the length of time expended therein, the name and general qualifications of the credited technician who performed, or under whose direction and supervision it was performed, the equipment used, and the nature of the mineral believed to be in the claim. Such affidavit of performance may be a part of any certificate of or notice of location provided for by law. Such affidavit of performance of annual labor shall be filed within ninety days of the end of the assessment year.

The creation of the rights provided for herein shall be based upon the truth of the statements contained in such affidavit or statement or the certificate of or notice of location provided for herein, and no rights of any kind or nature shall vest or exist or be created or arise when any material statement or representation therein made is false.

SEC. 4. That there be added to section 2325 of the Revised Statutes of the United States (30 U. S. C. 29) the following:

"That the cost of a United States mineral survey, including the cost of fieldwork, plat of survey, and field notes made by or under the direction of the Secretary of the Interior, shall be deemed and considered labor or improvements for the performance of annual labor under section 2324 of the Revised Statutes of the United States (30 U. S. C. 28) and under section 2325 of the Revised Statutes of the United States (30 U. S. C. 29)."

SEC. 5. That the legislatures of the States and Territories are hereby authorized to enact legislation, not in conflict with this Act but supplementing the same, effectuating the recognition of geological, geochemical, or geophysical surveys, or other recognized means of determining the existence, extent of concentration, or accessibility of ore bodies and/or mineral deposits and permit said methods to be applied in lieu of any other location, or annual labor, or assessment work.

CLEARWATER, MINES, INC.,
Spokane, Wash., March 6, 1958.

Senator FRANK CHURCH,
Senate Office Building,
Washington, D. C.

DEAR SENATOR CHURCH: Referring to the press notice in the Wallace Miner stating that you had introduced a bill in Congress to suspend mine assessment work for the year ending July 1958, and also change the period for doing assessment work on unpatented claims on August 15 instead of July 1.

Our property, consisting of 6 unpatented claims and 12 patented, is situated in the extreme eastern section of Shoshone County, Idaho, near the State borderline of Montana. The property has been developed by more than 2,500 feet of tunnel work. The property is in an isolated section with no winter road facilities. Consequently when we were prepared to do assessment work the latter part of last June 1957, we found several feet of snow on our road, and had to go in on snowshoes.

It would benefit us greatly if your efforts in passing your bill would be successful.

Be assured that your efforts will be appreciated and remembered.

Very truly yours,

H. G. LOOP, *President.*
JOHN A. HEALY, *Vice President.*

RARE METAL MINES, INC.,
Spokane, Wash., March 3, 1958.

Hon. FRANK CHURCH,
United States Senate,
Washington, D. C.

DEAR SENATOR: I and my colleagues heartily endorse the two bills recently introduced by you and fellow Senators Alan Bible and James E. Murray suspending assessment work on unpatented mining claims for the current year, and for concluding the work on August 15, instead of July 1, as at present. Along with other members of the North West Mining Association, of which I was president at the time, we were instrumental in getting the date for concluding assessment work changed from January 1, to its present time of July 1, but the latter date is much better. I would like very much to have a copy of each bill.

Yours most sincerely,

ARTHUR L. HOOPER.

BLACKWOOD, N. J., *March 11, 1958.*

DEAR SIR: As I am the holder of some 14 mining claims in the State of Idaho, and have to travel nearly 3,000 miles yearly to do assessment work on said claims, I would like to take this time to thank you for the interest you are showing for the small miner and prospector.

The bill you are trying to get passed whereby we would have a year's grace in performing our assessment work would surely help us tremendously, especially those of us who have to travel such long distances. It would surely give us a chance to acquire more capital from our wages, whereby we could make a larger progress in our effort to develop said claims, and perhaps give us a better chance in developing them to a point where we could get the capital to work them on a profitable scale. So in closing may I wish you success in your effort to pass this bill, and also I for one thank you sincerely for your effort, whether it is successful or not.

Once again best wishes for your personal success, which I know would help us greatly.

Thanking you,

Yours truly,

CHARLES ORR.

SUNNY PEAK MINING CO.,
Spokane, Wash., March 7, 1958.

Senator FRANK CHURCH,
Washington, D. C.

DEAR SENATOR: Your bill to eliminate assessment work on claims this year and extend the due date for work to August 15 meets with my approval. Our company is an Idaho corporation with property in Montana and Washington. I am also interested in other properties in these three Northwest States.

Yours very truly,

DALE LAMPHERE.

Mr. REDWINE. The first two witnesses this morning will address themselves largely to S. 3186. May we have S. 3186 and S. 3307 printed at this point in the record?

Senator CHURCH. Yes.

(S. 3186 and S. 3307 follow:)

[S. 3186, 85th Cong., 2d sess.]

A BILL To extend for one year certain programs established under the Domestic Tungsten, Asbestos, Fluorspar, and Columbium-Tantalum Production and Purchase Act of 1956

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 5 of the Domestic Tungsten, Asbestos, Fluorspar, and Columbium-Tantalum Production and Purchase Act of 1956 is amended by inserting before the period a semicolon and the following: "except that the programs established under subsections (b) and (c) of section 2 shall terminate on December 31, 1959".

[S. 3307, 85th Cong., 2d sess.]

A BILL To reinstate certain terminated oil and gas leases

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the payment of the annual rental, which was due no later than September 3, 1957, but which was made on September 6, 1957, with respect to noncompetitive oil and gas leases Colorado 08830, 08861, and 08862 shall be deemed to have been compliance with the terms and provisions of those leases and of the Mineral Leasing Act of February 25, 1920, as amended (30 U. S. C., sec. 181 and the following), and those aforementioned leases which were automatically terminated for the failure to make timely payment of rental are hereby reinstated as of the date of that termination.

Mr. REDWINE. May I point this out, Mr. Chairman:

It is a very simple bill. All it does is to extend the asbestos and fluorspar purchase program for 1 year. It increases neither the amount of money involved nor the tonnage involved. It extends the termination date.

Senator CHURCH. Our first witness this morning is Mr. Jack Neal, of Globe, Ariz.

Mr. Neal, would you like to come forward?

We are happy to have you with us this morning, Mr. Neal. We appreciate your coming all this distance.

STATEMENT OF JACK NEAL, GLOBE, ARIZ.

Mr. NEAL. Thank you, sir.

Mr. Chairman and Senators, I would like to outline to you gentlemen what the asbestos plans in Arizona have accomplished and what our future holds.

First, I would like to say that the program for the purchase of Arizona asbestos crude under Public Law 733 will terminate June 30, 1958. There will be approximately $1 million of appropriated money left in the program. The Arizona asbestos producers respectfully request and urge the committee to recommend a time extension of 1 year so the asbestos producers of Arizona can fulfill their allotted tonnages.

The asbestos mines in Arizona are all small and scattered over a wide mountain area with Globe as a center for milling and shipping point. The mines produce three types of fiber such as soft, semisoft, and harsh fiber.

In the past, soft fiber was the only type fiber on the market, but in recent years semisoft and harsh fibers have found a place in industry, especially in the lower grades.

There is a very bright future for low iron white chrystotile asbestos in the lower grades if milled and blended properly. We have a great opportunity for blending of these various fibers to meet certain industrial demands. We have right in the Globe area all three varieties available. Markets are becoming available all over the world. However, the asbestos industry in Arizona must be able to continue to market our high-grade crude fiber to the Government until small low-grade mills are established in the district and other mills improved upon and market and minerals technology is worked out on our particular types of fibers.

The Arizona asbestos producers who are producing in Arizona are D. W. Jaqway Co., Metate Asbestos Corp., L. E. Town Asbestos Co., Guy Phillips Asbestos Mines, the American Fiber Corp., American Asbestos & Cement Co., Board Tree Saddle Asbestos Mines, and Reynolds Falls Asbestos Mines.

Our firm, the Metate Asbestos Corp., is now working with one of the leading consulting and engineering firms from the Thedford Mine area in Canada. They are now engineering a small low-grade mill we hope to erect near Globe, Ariz., in the very near future.

Given more time to produce under S. 3186, we feel that there will be other mills erected in the Globe area for the processing of filter fiber, industrial fiber, and building material fiber.

I would like to recommend that the Government continue a buying program of Arizona crude 1, 2, and 3 for 1 year past December 31, 1958, with funds already appropriated.

Several new markets are showing great promise for our industry, such as atomic energy, plastics, and filtration. Low-iron white chrysotile fiber is finding many new uses from all over the world, and we feel that with proper milling technology, market analysis, research, and time we can eventually continue as a healthy, stable industry on our own.

I would like to read a letter from one of the leading mills in the Los Angeles area, whom all of the mines in the area have been shipping our fiber to. This is addressed to one of the producers in the area, Mr. Haines. It says:

> For the past 7 years our company has been receiving fiber coming from Arizona as chrysotile asbestos which has been produced in the Globe, Ariz., area. This past year we processed 1,451 tons of asbestos fibers, which also includes our shorts and whites, which have come from the operations in Arizona after they have taken out the crudes 1, 2, and 3 for the Government stockpile, and also includes the wastes and tailings that they have after taking out what other grades in the 4's and 5's groups that they are capable of doing with their own machinery. We have found that certain industry really prefers the Arizona chrysotile asbestos fiber over asbestos that is imported from other countries, due to the fact that it is white in color with low-iron content that enables it to be used in places that they cannot use the darker colored material from Canada, which contains a higher iron content.
>
> We have run several tests in the plastics industry and other related industries and we feel this tonnage in this line will grow after this initial test period is completed, and therefore we would certainly like to see the producers and miners in the Globe, Ariz., area continue to operate because we feel that this demand is going to be greater than what they will be able to produce after they have taken out their crudes 1, 2, and 3. We feel that our tonnage could double or triple within a very short period of time providing some of the various uses to which we have introduced Arizona chrysotile develops.
>
> Please keep us posted as to the outcome in the future of Arizona chrysotile asbestos because we feel it is quite important to many of our customers now located in the southern California area.

In regard to economic importance of our mines to our Globe-Miami area and to the State of Arizona, we feel we are quite important, especially with the copper situation as it is.

Mr. Jess Stevens, chairman of the San Carlos Apache Tribe, will testify on the asbestos mines and what they mean to his people.

We would like to thank you, Mr. Chairman and members of this committee, for allowing us to testify before your committee.

I would at this time like to introduce Mr. Stevens of the San Carlos Apache Tribe.

Senator CHURCH. Before Mr. Stevens comes forward, Mr. Neal, you mentioned at the outset of your testimony that there is approximately $1 million left in the program. I take it that that is $1 million of appropriated money for the purchase program that is unexpended.

Mr. NEAL. That is right. At the present time there is approximately $1½ million, but the $500,000 will take us through June 30.

We hope for the extension of this program so that we can go ahead and fill the allotted tonnage that the other $1 million would cover, and it will not require any additional money.

Senator CHURCH. Under the present law the program terminates at the end of this year. The purpose of S. 3186 is to extend it for another 12 months?

Mr. NEAL. Yes.

Senator CHURCH. But it will involve no additional authorization for public money.

Mr. NEAL. That is correct.

Senator CHURCH. Tell me approximately how many miners are employed in this industry in Arizona.

Mr. NEAL. We hire mostly all Apache Indian people in Arizona. There are approximately, I would say, 200 miners involved in the mining of asbestos in Arizona, with an additional probably of 75 white supervisors and people from the mills. Practically all of the miners in the mines are San Carlos and White River Apache Indians, and they are doing a very good job.

Senator CHURCH. Is the asbestos that the Government purchases under this program presently being stockpiled?

Mr. NEAL. That is correct; yes. It is considered one of the strategic minerals of the Government.

Senator CHURCH. Mr. Redwine, do we have a report on this bill from the Department of the Interior?

Mr. REDWINE. We do not.

The sponsors of the bill are pressing very hard for it, and I have just been talking with the Department of the Interior on it, and I think we will have it in the next day or two. I understand that the Department of the Interior report has gone to the Bureau of the Budget and it is being held up in the Bureau of the Budget.

The Department, however, may I point out, strongly urged the enactment of the original legislation.

Senator CHURCH. We can expect a report then from the Department soon?

Mr. REDWINE. Yes, sir.

Senator CHURCH. Thank you very much, Mr. Neal. We certainly do appreciate your testimony, and we would like now to hear from Mr. Jess Stevens.

Mr. NEAL. Thank you.

Senator CHURCH. Welcome to the committee, Mr. Stevens.

STATEMENT OF JESS STEVENS, REPRESENTING SAN CARLOS INDIAN TRIBE

Mr. STEVENS. Thank you, Mr. Chairman.

Mr. Chairman and honorable Senators, it is indeed a great pleasure for me to be here and appear again before you as an American Indian from Arizona.

My real name is Jessie James Stevens, chief of the Apache Tribe.

I am going to try to make myself as clear as possible, as I don't speak English quite as fluently as I should.

Senator CHURCH. I think you speak it very fluently.

Mr. STEVENS. Thank you very much.

Ladies and gentlemen, I am here for a good reason. I am not an expert in the production of asbestos, but I am an expert among my own Indian people, and try to lead them to the surviving point.

The biggest deposit of asbestos in Arizona is in my reservation, and it affects my people. I operate my own law enforcement, which we pay out of tribal funds. We set up a budget each year for our tribal

police law enforcement on the reservation. That money alone amounts to around $7,000 or $8,000 annually for law enforcement. The Federal Government does not have one dime in that program. It is a very sad picture at the present time. After July 30 I will only have $18,000 left for the coming year to operate on. The tribal government's operation costs anywhere from eight to one hundred thousand dollars a year.

The Indian boys that I have working out in these asbestos mines, I would say a little better than 200 men, mostly are GI veterans of foreign wars. They have families.

Mr. Chairman, it is a sad situation. It is sad to see humans suffer. A lot of the boys came to my office and put the pressure on me by saying: "Now, listen, Mr. Chairman, how are you going to provide for my little ones?"

I fought for freedom in this last war. What kind of freedom am I getting? What is the democracy that I fought for?

My children need clothes. My children need food, to go to school in order to be able to learn to speak good English so that someday they may be on their own.

As a matter of fact, right today I am stressing among my people that they should go to a higher school to get better education, become professional people, become doctors and lawyers and dentists and so forth, and I am only hoping that I live long enough to see that I will not have to call beyond my reservation for these people.

If the asbestos stockpile does not give us any more time under this program, my people are going to be on a starvation list.

As I said before, I don't know much about the production of asbestos, but we certainly have a large quantity of asbestos on the reservation.

Mr. Neal and several others here have furnished a school bus. They were good enough to furnish a school bus, and are transporting some of our schoolchildren and also some of the non-Indian kids within a distance of about a little over 100 miles every day in order to get kids to school. We didn't have enough money to buy a bus. They were good enough to furnish us with a bus.

I know, by laying off men, it will affect a little over 1,000 Indians. I don't have the money to feed them. I don't have money enough to send them through schools. As I said before, it is a sad situation. I hate to see little ones, and I hate to see any human beings suffer from hunger.

I am sure, if you put yourself into my place, that the Congress of the United States has a very sympathetic feeling and will help these American Indians. Therefore, I am merely asking, please, do what you can to help us so that we get over these rough spots.

We are now taking many of the operations over ourselves from the Federal Government. For instance, we have tribal enterprises of livestock. We have farms which we are trying to operate, which bring us very little income. Most of the income that we have been getting in the past few years has been from the asbestos corporations. We receive the revenues from that, and we put it into the general fund of the tribe, and each year I make a budget. I plan budgets for various programs. The biggest part goes into the educational fund. We have tried to set up scholarships for some of the very promising young students that are going to be graduating from high schools, but we don't have enough money to go around.

The only way that we can support ourselves is through education, but we must have job opportunities on the reservation in order to do that. We must have the income in order to take care of all of the indigent Indians.

I came here a couple of years ago and I appeared, I believe, in this same room here. I made the same identical statement, and I appreciated it very much after it came out in the record. I saw the record and I appreciated it very much. I was well pleased.

At this time I am asking again, please, for just an extension of time on this asbestos business because, speaking for my Indian people, I don't know how these gentlemen are producing asbestos; I have very little idea of that. However, my people are so involved that it is pathetic when it comes down to starvation.

As I said before, many of these boys are GI veterans of foreign wars, and that is what hurts. Therefore, please take this into very sincere consideration in behalf of my Apache people.

I certainly thank you.

Senator CHURCH. Thank you very much, Chief Stevens, for your eloquent and moving plea on behalf of your people. We appreciate your coming here.

How many Indian people are there on your reservation?

Mr. STEVENS. There are a little over 4,500 Indians; possibly a little bit more than that.

Senator CHURCH. You would judge that there are about 200 Indians who are actually engaged in the mining industry and about 1,000 all told who are dependent upon this industry?

Mr. STEVENS. I would say a little over 1,000, and because the Indian people are just like Mormons, they have lots of children. Not only that, but their relatives are coming in and moving in with them because of unemployment. Therefore, I would say it would involve a little over 1,000 Indian people on the reservation. That is a lot of people.

I better come back with a very favorable report to my people or, else, I will be scalped again. I am getting scalped now by my people.

Senator CHURCH. Mr. Redwine, do you have some questions?

Mr. REDWINE. I have one, Mr. Chairman.

Mr. Stevens, I know you are not here seeking welfare relief or anything like that. I understand that, but I would like to ask you this question:

Are the Apache Indians eligible for State welfare relief in Arizona?

Mr. STEVENS. It all depends on who is in that county and who is in this county. We are in 2 counties, and I will say for 1 county that there is a very sympathetic-minded person who has helped some of my Indians. And then in the other county it is just the opposite way. Many people, I thought from judging my Indian people, would be eligible, but have been turned down.

Mr. REDWINE. Mr. Chairman, I would like to say that, at the request of Senator Hayden, the staff has made a study of that. We find, although the Apaches are not asking for welfare relief, that, by and large, they cannot get it, and their only hope of employment is some such legislation as this. The staff study indicates that.

Senator CHURCH. I have one other question, Mr. Stevens.

I would like to ask, with respect to the young Indians who are engaged in the mining, do they receive wages directly or does the money go directly to the tribe?

Mr. STEVENS. They receive the money directly in wages, and that also helps to operate my tribal store that we operate ourselves. We own it and operate it. They trade with us and it brings in a lot of money, and then we take it out and put it in the tribal fund, and, of course, we get a large amount of royalties from these mines, and that is what helps.

Senator CHURCH. It is both from the royalties and then from the trading that the Indians do in your tribal store?

Mr. STEVENS. That is right.

Senator CHURCH. Let me tell you how much I appreciate your coming. You have come a long distance and you have made a most eloquent plea on behalf of your people.

Mr. STEVENS. I thank you very much.

Senator CHURCH. Our next witness is Mr. Robert P. Porter, president of Porter Bros. Corp. of Boise, Idaho.

Mr. Porter, we certainly appreciate your coming that long distance, and we will be happy to hear any statement you care to make in regard to this very important matter.

STATEMENT OF ROBERT P. PORTER, PRESIDENT, PORTER BROS. CORP., BOISE, IDAHO

Mr. PORTER. Thank you, Senator Church.

As you said, I am Robert P. Porter, president of Porter Bros. Corp. of Boise, Idaho. This corporation has been mining domestic columbium-tantalum-bearing ores since 1955 and is at this time the principal producer of these materials on the North American Continent.

Most of the domestic placer and pegmatite deposits not only contain columbium-tantalum ores but also the crystals of euxenite and/or samarskite, monazite, ilmenite, garnet, magnetite, and zircon and/or a combination of the above-mentioned crystals.

Euxenite and/or samarskite when chemically refined contain the following metals: uranium, columbium, tantalum, thorium, titanium, and a heavy rare earth fraction including the yttrium group. In other words, when the domestic mines are operating, they are not only producing high-quality columbium and tantalum minerals but also other minerals associated with the nuclear age which are presently being imported into the United States from foreign sources.

Columbium and tantalum have been known for a century and a half, but only during the past few years have they assumed such an important place in the metallurgical field due to research and development in uses in the following fields: Turbine jets and jet engines, chemical processing equipment, medical equipment, electronics components such as parts for radar, radio and computers, guidance systems, high-temperature alloys, nuclear applications, rockets and missiles. Many of the byproducts will also come into use in the above-mentioned fields.

Columbium-tantalum mining is predominantly a foreign industry. Nigeria, the Belgian Congo, Norway, Brazil, Australia, and the Malay States are the principal ore-producing countries while domestic output until 1956 consisted of intermittent and minor production from the States of South Dakota, Colorado, New Mexico, Maine, New Hampshire, and North Carolina. During the last few years the States of Idaho, Montana, and California have been included.

In 1956 domestic production increased seventeen-fold and will continue to increase if the domestic producers are placed in a comparable cost position with the low-cost foreign producers.

Columbium-tantalum ore imports into the United States: 1947, 2,760,000 pounds average; 1953, 5,770,000 pounds; 1956, 9,640,000 pounds; 1957, 3,350,000 pounds, estimated.

Domestic production of oxides: 1947–51, 1,361 pounds, average; 1953, 14,867 pounds; 1956, 212,606 pounds; 1957, 360,000 pounds, estimated.

One will note from these figures that the domestic production has gradually increased. Present production can be maintained and can be further increased due to the known deposits which have not come into production because of the uncertainty of the domestic market. The consumption of the ores for domestic industries was not measured until 1952 when 350 tons were used, while consumption in 1956 was 810 tons, showing a 130 percent increase. The future consumption of the two metals is expected by competent observers to be accelerated by an even greater percentage in the next few years due to additional research and discoveries made in characteristics and uses of the metals.

The United States Government, through the Defense Mobilization Procurement Agency in May 1952, had a stockpile program where both domestic and foreign materials were purchased and incentive bonuses were allowed to the producers.

The foreign part of this purchase program was discontinued in May 1955, and the domestic program may be discontinued June 30, 1958.

The price of concentrates before May 1952, remained steady from about $1.70 to $1.75 per pound contained pentoxides for materials of 50 percent or higher in oxides. Average price paid by the Defense Materials Procurement Agency was $3.40 per pound while the last known import price, in 1958, according to the Engineering and Mining Journal, was $1.15 to $1.20 per pound.

No import duties are presently in effect on foreign ores although duties are in effect on semifinished and finished goods. Subsidy payments are only a stopgap measure and do not encourage the producers to go into new or expanding mining ventures.

The columbium-tantalum minerals and their associated minerals are available in th United States, and production can be increased if a program is set up whereby the domestic mining industry can be assured of a reasonable share of the United States market. This can be accomplished by reducing the amount of foreign imports or by obtaining a tariff or quota program which would assure domestic producers a reasonable degree of continuity of operation.

These measures would put this country on a sound footing as far as strategic metals were concerned if a war should occur, or would prevent a foreign cartel being formed due to this country being a have-not Nation.

I cite here as a basis for my information the United States Department of the Interior, Bureau of Mines, Metal Market, Report 2652 Columbium-Tantalum, 1956; The Canadian Department of Mines and Technical Surveys, Memo Series No. 145, 1957; Engineering and Mining Journal, February 1958; and United States Tariff Commission, September 1957.

Thank you.

Senator CHURCH. Thank you, Mr. Porter. I think your statement has been very explanatory. Thank you again for coming.

The Chair wants to extend a cordial welcome to the junior Senator from Colorado.

Senator CARROLL. Thank you, Mr. Chairman.

May I ask, Mr. Chairman, if Mr. Palmer is to testify soon?

Senator CHURCH. Inasmuch as Senator Carroll has just arrived and has expressed an interest in hearing Mr. Robert S. Palmer of the Colorado Mining Association, the Chair would like at this time to call Mr. Robert S. Palmer.

Senator CARROLL. I thank the Chair. I have to attend another meeting. I appreciate it very much.

STATEMENT OF ROBERT S. PALMER, COLORADO MINING ASSOCIATION

Mr. PALMER. Mr. Chairman and members of the committee, my name is Robert S. Palmer. I am the executive vice president of the Colorado Mining Association, which represents the mining industry of the State. We have members, however, in a great many of the other Western States, including the State of Idaho, and I would like to say that it is a great privilege for me to appear before this committee and the acting chairman, about whom I have heard a great many fine things from the mining people in Idaho.

Senator CHURCH. I appreciate that very much, and I want you to know that we are very happy to have you here this morning, Mr. Palmer.

Mr. PALMER. I don't believe that I have ever stated some of my qualifications to this committee.

Senator CHURCH. Why do you not state them for the record?

Mr. PALMER. I happen to be a graduate of the University of Colorado, with a couple of degrees. I have taken graduate work in geology at the university. During the war I completed war courses in mining and milling at the Colorado School of Mines. I have been a consultant to the Government, the Defense Minerals Production Administration, the House Committee on Small Business, and acted as a coordinator of mines for Colorado. Later I was selected as chairman of the hard minerals section of the American Bar Association, in which capacity I acted for 2 years.

Senator CHURCH. Are you also a lawyer, Mr. Palmer?

Mr. PALMER. That is correct. I have devoted much of my time to mining law.

I was elected to the Mineral Council of the American Bar Association. I have also served in that capacity with the Colorado Bar Association. I have acted as a trustee of the Rocky Mountain Mineral Law Institute. During the years I have had the opportunity of representing the mining industry I have had an opportunity to observe many of the activities of our Senators and Congressmen in Washington. I would like to state that it is my opinion that we are most fortunate in having a very fine, active and hard-working group of western Senators and Congressmen who have worked in unison for the good of the mining industry.

It is true that the mining industry has not always been successful in obtaining the relief that it has sought in the Nation's Capital, but

I have the feeling that that has not been due to any negligence on the part of any of the representatives of any of the mining States.

I would like to say that our organization is nonpolitical. It confines its activities primarily to mining and problems of the minerals industries, and in my experience in Washington I would like to say that I have never asked anyone at any time to favor anything that the mining industry sought on a political basis.

Here I would like to pay our respects to our two Senators from Colorado, Senator Gordon Allott, and Senator John Carroll, who is with us here this morning, and to point out that they have both presented factual statements concerning the condition not only of mining in Colorado but in other Western States to the proper committees, including this one, so that I shall not repeat that type of evidence here this morning.

Since arriving in Washington I have had the opportunity to examine a letter which has been sent by one of the executive departments to a Member of Congress. In that letter the inference is that the present deplorable condition of the mining industry is said to be due to two things:

One, a general worldwide recession, and, two, a curtailment of procurement of minerals for the stockpiling program.

It is my humble judgment that the situation which confronts the mining industry is far more serious than that, far deeper than that, and, for that reason, I would like to take a few minutes of the committee's time to refute that statement and to point out that the serious situation confronting the mining industry is the result of a long-term program. As to that, I will refer to my statement.

Senator CHURCH. Let me say before you commence your statement, Mr. Palmer, that I am certainly much impressed with your qualifications to speak. I think that very few witnesses come before this committee that have better credentials to speak for the mining industry than those that you have presented this morning.

I want also at this time to note the presence of Senator Gordon Allott, of Colorado, who has just come into the room.

Senator, Mr. Palmer had some very complimentary things to say about you and your interest in the mining industry and its welfare, as well as the interest of the junior Senator from Colorado, Mr. Carroll.

We are very pleased to welcome you.

Senator ALLOTT. Mr. Chairman, I appreciate that very much.

I would like to say this: I was down here and had to step out just at the time Mr. Palmer took the witness chair, and I would like to say this, if I may have the privilege of introducing him: I have known Mr. Palmer since we were in school together, in college. I knew him as an outstanding student. I have known him as an outstanding lawyer and as secretary of the Colorado Mining Association for many years, and I do not believe there is anyone that I know of who has given the constant, continuous, serious, objective study to the interest of all of our mining in Colorado that he has. Some have given great study to it for a while, but this has lasted now over a period of some almost 30 years that I know of, and I believe that he is greatly qualified and peculiarly qualified, because of his position, his interest and his studies, to be of help to this committee.

Mr. PALMER. Thank you very much, Senator.

Senator CARROLL. Mr. Chairman, I would like to say, too, that I have known the witness, Mr. Palmer, for better than 30 years, and I associate myself with the remarks of my senior colleague.

Mr. Palmer not only has the qualifications he has outlined here, but for many years when I was a member of the other body he was constantly seeking and searching and fighting for legislation which would be helpful to the mining industry, and, in my opinion, had it been accepted some 8 or 9 years ago, we would not be in the predicament that we are in today.

I think he is especially qualified to comment on the predicament in which this industry now finds itself today, and I am very happy to have him appear again before this committee. He has been here many times, and he has always given sound advice.

Mr. PALMER. Thank you very much, Senator.

Senator CHURCH. Mr. Palmer, you may continue with your testimony.

Mr. PALMER. May I make one request, and that is, to the filing of a report by the Secretary of the Interior that I be granted the permission of the committee to file a short statement which may deal with the report of the Secretary.

Senator CHURCH. I see no objection to that. You may have that permission.

Mr. REDWINE. Mr. Chairman, do I understand the witness to mean that he will file a report after Secretary Seaton testifies?

Mr. PALMER. Yes.

Senator CHURCH. I take it that this report will be a written report that you would like to file at that time?

Mr. PALMER. Yes.

Senator CHURCH. Fine.

(No subsequent report was filed with the committee.)

Mr. PALMER. The State of Colorado, all mineral-producing States, and the Nation as well benefit greatly from an active, expanding mineral industry. My State under ordinary conditions can and does produce many of the strategic and critical minerals which contribute greatly to the American industrial machine not only in war but in peace.

Among the necessary minerals other than the precious metals we produce are lead, zinc, copper, molybdenum, uranium, vanadium, fluorspar, beryl, tungsten, manganese, feldspar and many other lesser know metals and minerals. We have a widely diversified mineral storehouse within our boundaries.

We were among the first to dispel the fears of those who would have us believe that we are a have-not nation mineralwise. We have recently proven beyond a reasonable doubt that ore begets ore and that mining activity, when properly encouraged with worthwhile incentives, produces results.

Witness, for example, the shortage of uranium when the Atomic Energy Commission first announced its inspiring programs and today's impressive production of that mineral.

The domestic mining industry, at least the smaller segment of it, and, more recently, the entire industry, has been fighting for survival. I recall the effort made by the Congress, as Senator Carroll has indicated, 10 years ago to enact legislation designed to encourage do-

mestic production. In the debates on that bill, referred to as H. R. 1602, it was stated by the sponsor that it was designed to continue what was called the premium price plan for copper, lead and zinc for a 2-year period.

The plan had been in operation since 1942. From 1942 to 1945 it was authorized by Executive order under the War Powers Act because there was a shortage of those strategic materials. In 1945 the shortage continued. So Congress extended it for another year.

In the efforts to extend it for an additional 2-year period strong opposition was voiced by many leaders of the industry whose interest had largely been centered on foreign production.

Our Government was gradually developing a world program—call it foreign aid, mutual aid, free trade or whatnot—to encourage mining companies to go abroad and produce minerals for the American market from foreign sources.

Here it might be said that there are those who might be critical of some of our major mining companies for pursuing this course, but I am not one of them. I have come to realize that they are but following a course of action which Uncle Sam prescribed, and they are attempting to develop resources of many foreign countries which otherwise would not have been developed as rapidly had it not been for beneficient Uncle Sam.

Ten years ago, mind you, the domestic mining industry was being hit with a two-edged sword; one, the people were being sold on the theory that we had exhausted our mineral resources. There was a report given at that time by a commission headed by Mr. Paley, known as the Paley report, which, I might add, is cited by economic professors and swivel-chair miners of the country to indicate that we are practically out of minerals in the United States.

Two, we were being sold on the advantages of investing our money abroad, loaning and, in fact, giving it away, in an all-out effort to encourage production outside our borders. The Allen bill, which I have referred to, passed the Congress only to be vetoed by a former President, who, in his veto message, showed clearly that it was no longer the desire of the then administration to continue the encouragement of domestic mineral production.

To overcome the objections raised by the President, many segments of the industry came to Washington for conferences with administration and congressional leaders. As a result of these conferences, a bill sponsored by the chairman of this committee at that time, the Honorable Joseph C. O'Mahoney, of Wyoming, received executive department approval. The measure was known as S. 2105. It passed the United States Senate twice, but the Rules Committee of the House refused to give it a rule, and congressional leaders, including the junior Senator from Colorado, who was then a Member of the House, were unable to gain sufficient votes in the House to pass the legislation even with administration approval.

Subsequent to this unfortunate event, various committees of the Congress, including the Small Business Committee of the House, conducted extensive investigations in the field, and visits were made to practically all of the mining centers of the Nation by that and other committees; the Small Business Committee of the Congress went into the areas in which mining operations were being conducted and

listened to witnesses from the various mining districts; then compiled a report of its findings and recommendations: Copies of the report were placed upon the desks of practically all of the Members of Congress, showing that there were differentials in costs between production within the United States and without, that other advantages existed, such as cheap labor, low taxes, cheap transportation and so forth.

This situation did not, however, prevail in every country, for there were equalizing factors in some. But, in the main, it was advantageous for a producer to do his mining outside the United States.

Additional hearings were conducted by this committee and by other committees in which an effort was made to amend various pieces of legislation which would have given the domestic industry a new breath of life. But, in spite of all this effort, the industry continued to disintegrate and die.

The slaughter of domestic mines has been a national disgrace.

I recall when we used to hold meetings in Reno, Nev., for example, there would be 3,000 or 4,000 men show up for these meetings, small operators for the most part, mining people of all descriptions. I have heard it said that if you had a meeting of the mining people in Reno today you would probably have a small dozen.

It has been contended, and I think properly so, that the Nation cannot remain strong without an active, healthy, going mining industry, and yet there is anything but a healthy, active, going mining industry in the United States today.

Stockpiling legislation helped the industry some, and then, of course, the buy-American provision of that act when it wasn't sidetracked by engenious bureaucrats was very helpful.

It is interesting to note that in correspondence with our office in Denver early administrators of that act proclaimed with firmness—

That there was nothing in the Stockpiling Act which showed the intent of Congress to strengthen the domestic mining industry.

In fact, certain administrators intentionally drove the price of metals downward by bidding less than the then market price. At one time the administrators of the Stockpiling Act were openly bidding less on the market than the world price for metals.

I need not advise you that when metals were in short supply and we had a ceiling price over our heads here in the United States the world price increased to such an extent that the American consumer was paying far more for the products of mines than a sound domestic mineral program would have cost. In fact, contracts were made at that time by our Government for foreign production to insure us of outside sources of supply which were over today's market, that is in excess of present quotations. And here I would like to say that it is very easy to condemn the administrators at that time who made long-term contracts at prices above today's market for foreign production, but at that particular time I happen to know, because I was in the agency that was doing the contracting, that it was thought advisable for the safety and security of our country to make those contracts with foreign producers at the prices quoted.

Senator CHURCH. May I ask a question here, Mr. Palmer?

Mr. PALMER. Yes, sir.

Senator CHURCH. You mentioned just a minute or two ago that there had been a buy-American provision in the legislation that we

are now considering, but that it was circumvented by the ingenuity of those administering the law. Could you explain that a little further to me, please?

Mr. PALMER. Originally, when the Stockpiling Act was being considered by the Congress, it seemed advisable to leave out the buy-American provision altogether.

Senator ALLOTT. When was this, Mr. Palmer?

Mr. PALMER. This was about 1947, I believe.

Senator CARROLL. The buy-American provision, I think, went into effect in 1947, or it might have been 1948.

Mr. PALMER. I understand now it is 1948.

Senator CHURCH. That buy-American provision, I take it, pertained to purchases made by the Government for the stockpile to be bought from domestic mines. Is that correct?

Mr. PALMER. In other words, if the same price were quoted by an American producer, taking into consideration the so-called concessions which were being made to foreign producers, the American producer was to be given preference.

It should teach us all an important lesson, namely, that, as outlined by the Stockpiling Act, the United States cannot become totally dependent upon foreign sources for its supplies of minerals, for, as indicated in the act itself, this would be a dangerous and costly experience indeed.

Some spokesmen for the mining industry have alleged—and I believe that even one of the members of this committee has inferred—that this program resulting in the destruction of American mines was communistically inspired. In other words, America would be hopelessly dependent upon foreign sources which may be cut off in the event of an emergency.

The mining industry has emphasized on numerous occasions the dangers involved to the national security in closing down our mines, not only to the economy of the respective areas in which the mines are located but to the loss of skilled workers who must train for years to become proficient in their work. Today a miner is a skilled workman. He has to be trained. He is a high-paid workman.

It is regrettable, but in many mining camps today it is becoming more and more difficult to find skilled workmen who are willing to devote their lives and their efforts to the production of minerals within the country.

We have exported our know-how and our best equipment and mining experience.

There was a time when the efficiency of mining was all in favor of the American miner. Today in many sections of the world, even though lower wages prevail, efficiency has increased remarkably well. It would, therefore, seem to be quite clear to any thinking person, regardless of whether he is connected with a mining operation or not, that we should adopt a realistic mineral program in the United States, not one designed to help only the prefered segment of the industry or the lower-cost operators.

The word "marginal" has been used in the Halls of Congress and by many so-called mining experts to mean those mines generally located great distances from markets and of a smaller nature than, say, the low-cost large mining operations. In rebuttal it has been pointed out

that every large mine was once a small mine and that in a great many instances mines have been uncovered and developed by prospectors and small miners.

Children should receive more protection from the devastating influences of present day economics than grownups, and yet today we are not fighting for any particular segment of the mining industry. We are fighting for the survival of the entire industry. Most of the smaller segment has been killed off not through any fault of the mining industry, as has been foolishly stated, because of any division in the industry, but because the various administrations, including this one, have been unable to take the necessary steps, or unwilling to take the necessary steps to provide the means for survival.

It is all well and good to show today how many people are unemployed in the mining districts. The hardship, the distress, the turmoil, the strife, all have been emphasized in prior hearings very forcibly and very ably by our two Senators from Colorado as well as Senators and Representatives from all the other States. And statistical records are undoubtedly impressive in this regard, but in the main we are discussing here general principles.

As stated by Mr. Andrew Fletcher, president of the St. Joseph Lead Co., at our meeting in Denver, "Do we want a domestic mining industry?"

If we do not, then it should be clearly stated by the administration and by the Congress that we do not want to develop the mining industry in the United States. If, on the other hand, it is in the national interest to have an active, going mining industry, then the means by which the industry can become active must be provided by congressional action and administration approval.

A leader of our industry recently in an address inferred that the prospectors and developers had been too active in finding too many mines; that, on the other hand, industry had been slow in finding the end uses for the products of some of our mines.

It is true in many areas prospectors and developers have been active, but the record will show that Uncle Sam has given greater encouragement to foreign competition by making loans, grants-in-aid, tax concessions, cheap transportation, and giving many other incentives. It is my humble judgment that these more than anything else have resulted in an oversupply of metals and minerals upon the world markets.

It may be that accelerated purchases of materials for Government inventories for the purpose of solving economic problems tend to postpone rather than provide permanent solutions, as stated on the Joint Committee on Defense Production of the United States Government in its recent report, but what of the cost of postponing a realistic long-range minerals program?

Senator CHURCH. What you are saying, Mr. Palmer, is that stockpiling is no solution to the mining problem, has never been a solution, and, at best, merely postpones the time when we have to face up to the solution?

Mr. PALMER. That is right. It is an immediate aid and it has, I think, secured some industries in the United States against the dangers of depending upon foreign sources of supply in cases of emergency, but it is not the answer to our problem.

Senator CHURCH. In fact, is it not possible, Mr. Palmer, that the stockpiling program can even be an aggravation to the problem in that it might furnish incentive to increase production elsewhere in the world, and then, when the stockpiling stops or the bartering stops, the result is that the increased level of production means a greater influx of foreign metals onto our own markets?

Mr. PALMER. The Senator is exactly right, and that is exactly what is happening. That is why we have a surplus on the world market today, and I think that has influenced the situation more than any other factor.

Do those who officially watch the production of the domestic mining industry feel that it is a healthy development for the economy of the country and that it is sound reasoning to encourage its continuance?

Bankruptcy seems to be a poor solution for any problem, and the loss of taxes to Uncle Sam and to State and local governments would seem to be an important factor to be considered.

Studies have been made to show that whole communities depend upon mining to keep them in operation, and when mining is discontinued the whole economy of the area is dissipated.

Lead continues to be imported at needlessly high rates with 517,000 tons entering the United States in 1957 compared to 460,000 tons in 1956. The available domestic supply 1,341,000 tons in 1957 was therefore over 200,000 tons in excess of the 1,122,000 tons consumed.

In the case of zinc the surplus was 355,000 tons. Because of the records high imports of 794,000 tons, the domestic zinc consumption of 934,000 tons in 1957 was only slightly less than in 1956, the record consumption of 1,018,000 tons.

Senator CARROLL. Was that imports for the market or did it also include stockpiling?

Mr. PALMER. It also included stockpiling

Senator CARROLL. Do you know how much went into stockpiling under the barter provisions in that period of time?

Mr. PALMER. Under the barter provisions, no, Senator. I am sorry to say I haven't had access to those figures.

Senator CARROLL. Somewhere in the record, as I remember the debate, it was estimated that about $414 million worth of strategic and critical materials were put into the national stockpile by virtue of the extension of the barter provisions under Public Law 480.

This importation does include both for the domestic market and the stockpile?

Mr. PALMER. Yes, that is right. I can check those figures.

Senator CARROLL. I think that is good enough.

Mr. PALMER. Or consider the case of tungsten. A recent tariff report on this metal in which the Tariff Commission felt that a study such as authorized by the Congress should not be conducted showed, however, that tungsten was imported into the United States by at least two governments which were not recognizing the advantages of the system of private enterprise.

May I digress here to commend this committee for the amendment to the so-called tungsten procurement program which passed the Senate only to be objected to in the House, and to say that it is my humble judgment that had the Senate amendment prevailed the tung-

sten industry would not now be in the deplorable condition in which it finds itself. And I particularly want to point this out to the larger tungsten producers, as a case where the smaller segment of this industry deserved representation in Washington as well as the larger segment, and that all segments of the mining industry should be given consideration, in my humble judgment, in any realistic long-range mineral program.

Inflationaary developments and the desire to secure dollar credits were uppermost in the minds of the importing countries, not reciprocal trade.

Many plans have been submitted for your consideration over the years. I have mentioned but a few, but, regardless of what is done, it is the hope of the association I represent that when a commitment is made, whether it be for lead, zinc, copper, tungsten, uranium, or any other mineral by the Government, that that commitment be kept. Otherwise we will lose faith in our Government.

Nor do we desire any halfway measures. I daresay that any of the members of this Senate committee, or perhaps many of the witnesses who have testified at this hearing, could, if given the sole responsibility, develop a program which would insure not only a healthy domestic mining industry but would provide sufficient encouragement for a limited importation of minerals from abroad.

Some have indicated that we are entitled to 50 percent of the domestic market, or that we desire as much of the domestic market above 50 percent which we know some industries enjoy. In any event, it would seem that when the United States consumes as much of the metal of the world as it does, it has a perfect right to demand that its producers get 50 percent of the business.

Our association has suggested to you several plans, any one of which will get the job done. We sincerely trust that at this session of Congress a realistic long-range mineral program will be adopted.

It would seem to us that, after 10 years of careful consideration of a problem, that it is high time an answer is given.

I would like to say Mr. Chairman and members of the committee, we stand ready to help, aid, and assist this committee or any governmental agency or department in working out a program which will make America strong mineralwise.

Thank you very much.

Senator CHURCH. Thank you very much, Mr. Palmer, for your testimony.

I know that there will be questions here. Let me ask one question.

Mr. Palmer, when you speak of 50 percent of the market do you speak of that in a fixed percentage or do you relate it to particular types of metals, metals where the domestic market cannot produce 50 percent of our annual needs?

There are other metals where our domestic production exceeds 50 percent of our annual need.

Mr. PALMER. That is correct. I have particularly in mind lead and zinc, which are uppermost in the minds of most people appearing before committees today.

Senator CHURCH. Senator Allott, do you have some questions?

Senator ALLOTT. Just 1 or 2.

I want to congratulate you on a good statement, Mr. Palmer. You have been very constructive. I would like to explore just one thing with you.

You talk about a long-term program, and then in another place in your statement you use the words "realistic mineral program." I want to know what this means. Would you say that this would be fair as a statement, that what we are suffering most from in this country today is that Congress has failed to enunciate principles of a basic mineral policy?

Mr. PALMER. I think that is correct, Senator.

Senator ALLOTT. In other words, if you are going to use the words "long-term mineral policy" there can be no long term specifically set of tonnages or prices put on any mineral, can there?

Mr. PALMER. That is right; conditions change.

Senator ALLOTT. It seems to me that one of the thingss clearly that we must do in this Congress is to set forth a minerals policy by which we declare it to be the intention and the purpose of Congress to maintain our mining industry at a specified level, and we may arrive at it eventually as a percentage of production; we may arrive at it as a percentage of a use; or we may arrive at it in some other less tangible way. But it seems to me that we do need a statement by Congress that it is the intention of Congress that laws passed with respect to mining shall maintain our mining industry at a certain level for the protection of that industry so that it will not be shoved off, as it were, as we found ourselves prior to World War II and prior to the Korean War, and so that we will always have a certain level of not only economic health but a certain level of production for the production for the protection of our country.

Would you agree or would you differ with that?

Mr. PALMER. I think your statement is entirely correct, and I am sure that the industry will agree with it.

Recently at the United Mine, Mill and Smelter Workers meeting in Denver Mr. Roy Glover, the chairman of the board of the Anaconda Mining Co., made a speech which included many facts which should prove to the satisfaction of the Congress, I should think, that we should have a realistic price for copper, as an illustration, in the United States in order to supply the world demand, and surely our Government under present conditions is justified in adopting a program which will insure the production of minerals within the United States as well as without the United States.

Senator ALLOTT. Thank you, Mr. Palmer.

Senator CHURCH. I would like to say, Senator, in that connection that I have misgivings over some of the proposals that have been made before this committee that relate to fixed schedules, excise schedules, which may be all right this year but which may be all wrong next year. And I think if it is possible for us to achieve a formula that is equally sound this year or next, but can be made applicable to changing conditions, that, in doing that, we can come up with a long-range program that in fact is long range.

I just want to concur in the general sentiment that you are expressing. I think it is very sound.

Senator ALLOTT. May I also add to that. I think the approach, which you do not completely approve, nor do I, tends to stopgap legislation rather than long-term legislation.

Senator CHURCH. And the domestic mining industry has been stopgapped to death.

Senator ALLOTT. It certainly has.

Senator CARROLL. Mr. Palmer, do you care to give a brief résumé or summary of this statement which you first started out to discuss and then somewhere I got lost along the way. You were talking about a recession, worldwide, I show in my notes, and then, next, curtailment of production. What was that statement? And to whom was it issued? What was it about? What are the circumstances of its issuance?

Mr. PALMER. The letter came from the White House in answer to an inquiry regarding a suggestion that something be done to help the domestic mining industry.

The two points in the letter were as I have indicated.

Senator CARROLL. Excuse me for interrupting, but there was a time when a letter coming from the White House was generally understood to be a letter from the President. Nowadays we are left to wonderment. Was this a letter from the President or a letter from one member of the palace guard? Or would you rather treat that as a confidential matter? Was this a classified document?

Mr. PALMER. No.

Senator CARROLL. Do you have the authority of the person to whom it was sent to put it in the record?

Actually what we want to find out in substance is what is the basis. Do they have a plan?

You have been very forthright in the presentation. This was under a Democratic President. He vetoed a bill. I remember because I was in the Congress when he vetoed it. We did not agree with it. Then Senator O'Mahoney came forward as chairman of this committee. He had a bill, and we fought again. But the executive branch of the Government on that bill was in favor of it, as I recall.

Mr. PALMER. That is right.

Senator CARROLL. It was not defeated then by the executive branch. But I suspect, if my memory is good, it was defeated by some of the big mining companies and perhaps people who had a different viewpoint, too.

Mr. PALMER. I think your suspicion is well founded, Senator.

Senator CARROLL. Now we will come back to this letter.

Is there any reason why this letter should not be made available to this committee?

Mr. PALMER. The letter was shown to me, and I was asked to give a reply to it. If it would meet with your approval, I think I can get the letter for submission to the committee.

Senator CHURCH. It certainly would meet with my approval, and I think it is most appropriate.

(The letters referred to have been filed with the committee and are available for reference purposes.)

Senator ALLOTT. This letter must have been mentioned before I came back in the room. May I inquire what this letter was? Was there a reference in your statement here to it?

Mr. PALMER. No. There was a letter sent to one of the Members of Congress in reply to an appeal for immediate action to help, aid, and assist the domestic mining industry, to the effect that the present

condition of the mining industry was due to two things: (1) a worldwide recession, and (2) a curtailment of procurement for stockpiling purposes.

In other words, the inference from the letter would be that if we were not in a worldwide recession and if we had not discontinued the procurement of metals for stockpiling—particularly I have reference to the lead and zinc—we would not have a depressed mining industry in the United States. And the purpose of my testimony is to show that there are a great many other factors which have affected our present condition other than just those two.

We admit that those two factors have had an effect upon the domestic mining industry. As a matter of fact, I believe that at the time the western governors were holding their meeting at Reno, Nev., and the then Assistant Secretary of the Interior announcd that there would be a discontinuance of the barter program as far as lead and zinc were concerned, the prices of lead and zinc dropped the next day on the market.

Senator CARROLL. That was in 1957 when that price dropped.

Mr. PALMER. That is right.

Senator CARROLL. If I may interrupt here a moment, I think the President's statement—if it was the President who wrote the letter—that curtailment of procurement and stockpiling did have an effect on lead and zinc, did it not——

Mr. PALMER. That is right.

Senator CARROLL. In 1954, if I am right in this, that matter was before the Tariff Commission. The lead and zinc industry before the Tariff Commission and they gave a ruling showing that great harm had come to this industry, and the recommendation went forth to the President, as I recall. Am I right in my facts up to this point?

Mr. PALMER. That is right.

Senator CARROLL. The President then, or his office, the Office of Defense Mobilization, did activate a procurement program, that is a stockpiling program for lead and zinc.

Senator CHURCH. After the President had turned down the recommendation of the Tariff Commission?

Senator CARROLL. Yes, of course.

But, nevertheless, they did move forward in that field.

As a further step, in 1956, then came the barter program under 4 (a). And through that period of time there was stability on lead and zinc.

Mr. PALMER. There was additional procurement for the permanent stockpile in addition to the emergency stockpile known as the barter stockpile program.

Senator CARROLL. Supplemental stockpile program.

Mr. PALMER. Yes.

Senator CARROLL. Then when that barter program was abandoned in 1957 there was a depression that acted upon the price, and lead and zinc began to drop.

Mr. PALMER. That is correct.

Senator CARROLL. Again looking at a long-range program, the national needs for lead and zinc, our Nation's needs are greater than our production in this country. Is that not true?

Mr. PALMER. That is correct.

Senator CARROLL. We will just confine ourselves to lead and zinc, sort of as exhibit A.

Not speaking now of the immediate needs of lead and zinc, because the industry is very sick today, but for a long-range program is it not possible to do with lead and zinc what we have done with sugar and wool? We are in short supply in this country of sugar and we evolved a legislative program through a processing tax. A similar taxing system has been used for wool, and has this been fully explored by the mining industry?

Mr. PALMER. It was carefully considered at the recent meeting in Denver.

Senator CARROLL. We know that this is a longtime program. It will take a long time to formulate it. However, it seems to me we have to go into this field. If we are considering a long-range program we have to consider the various techniques and taxing devices to help the industry.

I did not want to interrupt your statement there. It has been considered, has it?

Mr. PALMER. It has been considered, and the program was submitted to the convention by Samuel S. Arentz, a very highly respected mining engineer in Salt Lake City.

However, it is the feeling of the mining industry, as you have indicated, that, while a plan such as submitted by Mr. Arentz might be considered on a long-term basis, it is doubtful as to whether all segments of the mining industry could agree on the plan at this session of Congress. Therefore, the recommendations of the emergency lead and zinc committee, of which I happen to be a member, were adopted in toto at our meeting and their adoption is the recommendation of our association.

Senator CHURCH. However, for the benefit of the committee, would you have any objection to the placing of this recommendation of Mr. Arentz into the committee record so that we may have the opportunity to review it?

Mr. PALMER. I would be very happy to.

Senator CHURCH. Fine.

(The material referred to follows:)

A PROPOSAL FOR PRESERVING THE DOMESTIC LEAD-ZINC MINING INDUSTRY

(By Samuel S. Arentz, mining engineer, presented at the meeting of the Western Mining Conference, Denver, Colo., February 6, 1958)

I do not have to detail for this audience the continuing critical situation of many segments of our domestic mining industry. You are all familiar with the increasingly frequent reports of layoffs and curtailments, with shutdown mines, disrupted organizations, and abandoned camps throughout our mining areas and with the resulting losses to investors, employees, and service populations. You know that these conditions are not due to worked-out mines, or to a failure of our industry to maintain a high order of technological progress. In fact, our overall productive capacity is as great as it has ever been. Nor is our trouble directly related to the general recession in business activity of recent months, although this has certainly intensified the problem. Our problems are primarily political, and result from policies of our Government which have directly and indirectly encouraged continued increase in foreign production and have permitted the resulting surpluses to be dumped on our markets at prices below the domestic cost of production.

The problems of the domestic lead-zinc miner are not unique. Our tungsten miners are out of business, and those producing many other mineral products are in serious trouble. Even our uranium mining friends may face similar problems in the not too distant future. While the basic problem is common to most of our domestic mining industry, I shall confine my remarks to the problems of the lead-zinc miner, because that is the branch of the industry in which I have spent most of my working years. I started school in the lead-zinc camp of Goodsprings, Nev., nearly 40 years ago and have personally experienced most of the vicissitudes of the industry since that time.

The Emergency Lead-Zinc Committee has recently completed an excellent presentation of the industry's case before the United States Tariff Commission, and that Commission is currently considering the industry's request for increased tariffs and for quotas limiting imports of lead and zinc into the United States. As you know, the industry made a similar request to the Tariff Commission for increased tariffs in 1953. At that time the Commission gave a unanimous decision granting the industry's request, but the decision was nullified by the President in favor of a temporary stockpiling program. Since 1953 the problems of the industry have become intensified by continued inflation of domestic production costs, increased foreign production capacity, and a downturn in worldwide consumption of lead and zinc. It is generally recognized that the maximum tariff increases the Commission can recommend are insufficient to materially aid the domestic industry under present conditions of worldwide surplus. For this reason, the Emergency Lead-Zinc Committee requested the addition of import quotas to the tariff increases, even though a portion of the industry is strongly opposed to quotas. It is probable that the President will not accept a recommendation from the Tariff Commission granting the industry's request for quotas. In this event the industry must necessarily return to Congress for the help it needs, and thanks to the excellent work of the emergency committee, and various State and local mining associations in presenting the case before the Tariff Commission, the industry can look forward with some confidence to receiving favorable consideration from the Congress.

No one seriously questions the critical condition of our industry, but there is a widespread misunderstanding of our industry and of the part it plays in our national economy. Too many of our fellow Americans share the attitude of the miner who says, "Shut her down if she ain't paying" when refused a pay raise during a period of hard going. They believe that we can continue to obtain all our metal requirements from foreign mines at low prices even though experience has shown that foreign production is not always available as required and the prices charged our consumers have a tendency to increase rapidly when free from the stabilizing influence of a strong domestic industry. Others have accepted the fallacious theory of conservation which urges retaining our minerals in the ground for future need, completely overlooking the investment in plant, know-how, and organization required to make a natural resource out of mineralized rock. The immense stockpiles of metal accumulated by our Government and the growing concept that the next war will be decided almost as soon as it starts, have tended to create a smug complacency on the part of our military planners that a healthy domestic industry is no longer essential to our national security. This is the same group which only a few years ago was sure our mines were worked out and which insisted on disrupting the market to accumulate stockpiles at a time when metals were in short supply. Our industry has made, and is continuing to make, significant contributions to the high standard of living we enjoy here in America, and was a major factor in our victories in 3 major wars within the past 30 years. Our country cannot permit its national welfare and long-range national security to become wholly dependent upon foreign mines for its mineral requirements.

We each have our own idea as to the best answer for the problems facing the industry, but there is general agreement within the industry that a suitable tariff rate will provide the simplest and most effective answer. During the 30-year period prior to 1940, the average tariff on lead and zinc ranged between 25 and 50 percent of the market price. On the basis of presently inflated costs, it would require a tariff rate in excess of 6 cents per pound of lead and zinc to provide equivalent protection for the domestic industry. The Tariff Commission, with Presidential approval, can increase the present tariff to a maximum

of 2.1 cents per pound on zinc metal and to 2.55 cents per pound on lead metal. These rates are obviously too low to materially correct the situation of our domestic mines. Any further increase must be obtained from Congress, and while I believe that the Congress will give favorable consideration to the problems of the industry, I do not believe that we shall obtain the help we need through a straight tariff increase.

Politics has been described as "the science of the possible." Political answers are seldom the ideal answer to any problem, and are not necessarily the right answer, but are usually compromises between completely opposite points of view. The political climate in Washington for the past 25 years has been favorable for the advocates of free trade and most of the troubles of our raw material producers have resulted from the ascendancy of this philosophy. I believe that as more of our industries are hurt by the free-trade policies of our Government there will be a change, but I do not believe there will be a change in time to solve the problems of our industry before most of our mines are shut down and our industry is damaged beyond repair. We should, of course, continue to press our case for adequate tariff protection for as long and as hard as we can, but we should also explore other avenues of relief.

The idea of subsidies and the controls that go with them are repugnant to all of us, and yet our domestic mines operate and compete in a subsidized economy. The costs of many of the supplies we purchase are determined by Government support prices. A substantial part of the wages we pay are used to buy agricultural products whose prices are inflated by Government supports. Competing metal concentrates arrive at our ports in subsidized merchant ships, they are paid for in dollars at arbitrarily established rates of exchange which provide a further subsidy and in many cases they come from mines and treatment plants which were explored, developed and equipped with direct or indirect loans or grants made by our Government, and in the final analysis tariffs themselves are a form of subsidy for the domestic producer.

Our views on subsidies for our industry are in part conditioned on the weaknesses of the premium price plan during World War II. The administration of this plan involved three fundamental weaknesses, in addition to those common to all Government agencies, namely:

1. Inequitable control of so-called profit margins by an arbitrary formula.
3. The absorption by the Government of approximately 95 percent of the waste or savings, as the case may be, of the respective producers, regardless of efficiency.
3. It was a definite step toward nationalization of the industry.

A precedent has been established in a related raw material industry which, with some modifications, could provide a workable answer to our problems. The National Wool Act of 1954 was designed to meet conditions in the domestic wool industry which closely parallel the conditions of the domestic lead-zinc industry. These conditions are well described in section 702 of the act, as follows:

"It is hereby recognized that wool is an essential and strategic commodity which is not produced in quantities and grades in the United States to meet the domestic requirements and that the desired domestic production of wool is impaired by the depressing effects of wide fluctuations in the price of wool in the world markets. It is hereby declared to be the policy of Congress, as a measure of national security and in promotion of the general economic welfare, to encourage the annual domestic production of approximately three hundred million pounds of shorn wool, grease basis, at prices fair to both producers and consumers in a manner which will have the least adverse effects upon foreign trade."

The funds for making the incentive payments to domestic woolgrowers are derived from the duties collected on imported wool. Growers sell their wool through normal market channels at whatever price they can get. They collect their incentive payment by forwarding sales documents showing the following:

1. Name and address of seller.
2. Date of sale.
3. Net weight of wool sold.
4. Net amount received by the producer.
5. Name and address of purchaser.

Since the inception of this plan the Government has successfully disposed of sizable quantities of wool purchased under a previous support plan and except

for such sales, has not been a factor in the market. The total of the incentive payments made in 1956 was $54,716,000.

In its study of the domestic lead-zinc industry for presentation of the industry's case before the United States Tariff Commission, the Emergency Lead-Zinc Committee generally agreed that the following levels of production were required to maintain a healthy domestic industry:

[In tons]

Lead:		
Estimated domestic consumption per year		1,125,000
United States mine production	385,000	
United States secondary metal	500,000	
		885,000
Required imports		240,000
Zinc:		
Estimated domestic consumption per year		1,100,000
United States mine production	600,000	
United States secondary metal	100,000	
		700,000
Required imports		400,000

During the recent years the actual imports of lead have averaged approximately 480,000 tons per year, and the actual imports of zinc have averaged approximately 700,000 tons per year, or nearly twice the tonnages required to meet the needs of our consumers when our domestic mining industry is operating normally. Obviously, continued foreign production at present high levels has built up surpluses which are disastrous to foreign and domestic producers alike. The domestic producers have already sharply curtailed their production and cannot reasonably be expected to continue to operate at uneconomic levels to allow foreign producers a market for their excess production.

It appears probable that the United States Tariff Commission will recommend, and the President will approve, increasing the duties on lead and zinc to 2.55 cents and 2.10 cents per pound of metal, respectively, the maximum allowed without congressional action. The corresponding rate on lead and zinc in ores and concentrates is 1.8 cents per pound of contained metal. As previously mentioned, these rates are too low to provide any material relief to the domestic industry under present conditions of worldwide surplus of lead and zinc. The industry has requested the imposition of quotas as the only other available relief through the Tariff Commission, but it is doubtful whether the quotas requested will be approved by the President even if they are recommended by the Tariff Commission. After action by the Tariff Commission and the President, on the decisions now pending, the industry will have to return to Congress for any additional help required. It is doubtful that Congress will approve tariff rates in excess of 6 cents per pound of lead and zinc, which are required under present cost conditions, but Congress may approve a more modest tariff increase and a return of the duties collected to the domestic producers on the precedent established by the National Wool Act of 1954. Under the circumstances, I believe that the industry should prepare a generally acceptable plan for presenting to the Congress, should the doubts I have expressed regarding the acceptance of quotas or the necessary tariff rates be realized. Such a plan should provide for the following:

1. Operation of a free domestic market under the law of supply and demand.
2. Uniform treatment of all domestic producers.
3. Nearly automatic operation.
4. An adequate allowance to maintain a healthy domestic industry.
5. A long-range program established by law.

The average domestic mine production of lead and zinc for the years 1947 through 1952 was well above the 985,000 tons of lead plus zinc accepted by the industry as the minimum required to maintain a healthy domestic industry. On the basis of data available from the United States Bureau of Mines, the re-

coverable metal production from domestic mines by tonnage groups to produce this minimum tonnage would be approximately as follows:

Mine production of lead plus zinc (tons per annum)	Group No.	Number of mines	Total mine production, lead plus zinc	Percent of total production	Percent of number of mines
0 to 500	1	665	45,000	4.57	77.24
500 to 1,000	2	61	45,000	4.57	7.08
1,000 to 2,000	3	53	82,000	8.32	6.16
2,000 to 3,000	4	22	56,000	5.69	2.56
3,000 to 4,000	5	12	47,000	4.77	1.39
4,000 to 5,000	6	7	31,000	3.15	.81
5,000 and over	7	41	679,000	68.93	4.76
Total		861	985,000	100.00	100.00

The number of mines in each group and their total annual production will obviously vary with conditions in the industry. As might be expected, casualties have been heaviest among the smallest, highest cost mines in group No. 1. The total number of mines in this group dropped from nearly 1,500 mines in 1939, producing approximately 55,000 tons of recoverable metal, to 479 mines in 1955, producing 25,000 tons of recoverable metal. As a percentage of total mine production, the drop was from 5 to 3 percent. During this same period, the number of mines in group No. 8, producing over 5,000 tons of recoverable metal per year, remained constant at 34 mines, and their production was nearly constant, totaling 670,654 tons in 1939 and 663,674 tons in 1955, but their percentage of the total domestic mine production increased from 67 to 77 percent.

Most of our large mines were developed over a long period of time from small mines and prospects originally operated by individuals who struggled from one development stage to the next. The long-range health of the industry requires not only a reasonably stable market for the production of our larger mines, but some encouragement for the prospector and small miner. I believe that this can best be accomplished by paying a fixed bonus over and above the open-market prices, whatever they may be, on a sliding scale, devised to take into account the differences in production costs as between mines in the various stages of production and which, at the same time, will provide a solid base for the initial increments of production for the larger producers.

As a basis for discussion, I propose the following scale of bonuses to be paid direct to the domestic miner on the basis of his production of recoverable lead plus zinc:

	Cents per pound
For the 1st 1,000 tons production per year	5
For the 2d 1,000 tons production per year	4
For the 3d 1,000 tons production per year	3
For the 4th 1,000 tons production per year	2
For all production over 4,000 tons per year	1

The estimated cost of the proposed bonuses would total approximately $50 million per year on the basis of a total domestic production of 985,000 tons per year of lead plus zinc. This is approximately the amount of the duties that would be collected on imported metal at present tonnages and at the maximum tariff rates that may be imposed by the Tariff Commission without congressional action, but is nearly twice the amount that will be collected if import tonnages are reduced to those contemplated by the industry's request for quotas. Under the proposal as outlined, the difference would, necessarily, be made up by higher tariffs or by direct appropriation by the Congress.

The proposal contemplates that each producer will sell his ores, concentrates, or metal through regular market channels at whatever price he can obtain. He would receive his bonus payments by submitting supporting data to the appropriate Government agency in a manner similar to the present silver affidavit covering newly mined silver. In the case of smaller mines, the custom mill or smelter purchasing the ores or concentrates could be authorized to make the payments, subject to reimbursement by the Government. Administration and overhead can be kept to a minimum, and the operation of the plan should be nearly automatic.

For the purposes of the program, a mine can be defined as an operating unit consisting of a shaft, an adit, or an open pit through which ore is regularly taken to the surface, regardless of ownership. Or a mine can be defined as segregated or aggregated units forming one operation on the same basis as they are combined or separated for the purpose of calculating depletion under the Internal Revenue Code.

A direct payment to the miner of the type contemplated under this proposal is worth twice as much as an equivalent increase in the market price of the metal, and would effect a considerable saving to the domestic consumer as compared with the cost of a tariff providing equal protection to the domestic miner. In the event of a temporary surplus of metal and a consequent drop in the market price, the small producers would not be wiped out and the larger producers could fall back on a higher average price for their production as they curtailed to correct the market condition.

The proposal does not eliminate the need for reasonable tariff protection. In fact, it is based on increasing tariff rates sufficiently above present levels to provide funds sufficient to pay the costs of the proposed bonus payments.

I claim no originality for the proposal outlined. This or similar proposals, have been considered by leaders in the industry since the end of the premium-price plan. I believe that a plant of this type offers the cheapest and most effective means of maintaining a healthy domestic lead-zinc mining industry and of assuring our consumers an adequate supply of lead and zinc at a reasonable price.

The plan would be virtually automatic in its operation, and will allow free operation of the market. It treats all domestic producers equitably, and provides encouragement for the prospector and small miner and the stable market conditions required by the larger producers.

The industry needs an effective, long-range program. The failure of succeeding administrations to provide such a program during the past 25 years has gradually driven men and capital from the industry. Many of the temporary expedients adopted have done more to encourage the foreign producer than to aid the domestic miner.

A strong industry can do much to improve its position through research for new markets and mechanization for lower costs. Our industry can probably do much more than it has done in these fields, but large capital expenditures are required, and our industry has been ailing for a long time.

I believe that legislation will be required to provide an effective answer to our problems, and suggest that the industry get together on a politically acceptable plan for presenting to the Congress as soon as possible. I believe that the proposal outlined here can form the basis for such a plan.

Senator CARROLL. I did not want to commit Mr. Palmer to a set program, but I was wondering if they are exploring the possibilities of the mining industry to this sort of an approach.

Senator CHURCH. I think it would be beneficial for the committee to have the recommendations of Mr. Arents, because his statement does outline a program of the general nature that you suggested.

Senator ALLOTT. Mr. Chairman and Senator, would you yield to me just a moment? I have just received a call, and I have to leave.

Senator CHURCH. Surely.

Senator CARROLL. Surely.

Senator ALLOTT. I would like to ask you, specifically, if this letter was written by the President.

Mr. PALMER. I can't answer that question.

Senator CHURCH. Was it signed by the President?

Mr. PALMER. The signature on the letter was that of the President.

Senator ALLOTT. And when was it written, approximately?

Mr. PALMER. In the last 2 weeks.

Senator ALLOTT. Mr. Chairman, I am going to have to leave to keep another appointment.

Senator CHURCH. All right, Senator.

Do you have any further questions, Senator Carroll?

Senator CARROLL. Just one observation. I think we ought to clear up the record here just a little bit, at least for myself. From 1942 to 1945, there was a program to stimulate mining, as I understand, and that arose by virtue of an Executive order under the War Powers Act?

Mr. PALMER. That is right.

Senator CARROLL. That was extended for a year?

Mr. PALMER. That is correct.

Senator CARROLL. It was after that period of time that we came to the Congress seeking legislation to try to correct the very condition in which we find ourselves today.

Mr. PALMER. Many members of the industry proposed an additional extension, at that particular time, of that plan.

Senator CARROLL. There is only one thought that occurs to me. When you say Uncle Sam was doing the planning, it seems we have to look and see who is doing the planning for Uncle Sam. I have been in some of the oil investigations, and Uncle Sam is charged with a lot of things, but I find the big oil companies kind of tell Uncle Sam what to do, and I wonder if that could be true in mining, too.

Mr. PALMER. I think the industry is more united today than I have ever seen it. I think the industry is working together in unison.

There may be some companies which have no mines in the United States that are still objecting to a domestic mineral industry program, but, in the main, I think the industry is working together in unison as it has never worked before, including the strong cooperation of all the mining unions.

Senator CARROLL. I ask Mr. Redwine—I asked the question the other day—do we have set in the record all of the American mining corporations and their holdings overseas in other countries, and the extent of their holdings, and the extent of their production, and the extent of their imports into this country?

Mr. REDWINE. No, sir; Senator, we do not.

Senator CARROLL. Could we not have that for the record so we would have some general idea?

Mr. REDWINE. It will be quite an undertaking involving several months of inquiry, but we will accomplish it.

Senator CARROLL. We have had this in the oil industry. We had all the major oil corporations, showing their holdings and their imports into this country. We get some idea of what we are dealing with.

Mr. REDWINE. We will develop that information, Senator.

Senator CARROLL. We found, for example, that the Standard Oil of New Jersey had approximately 200 subsidiaries operating in every free country in the world where its refineries were, and it seems to me, if we are going to deal with this mining program, let us get to the root of it and the core of it and find out who these people are and how big they are, and find out who the marginal owners are so we get some concept.

I am not going to commit Mr. Palmer to this, but I remember well in 1948 or 1949 when we had the premium price plan, which we thought was acceptable to the administration. This committee for it and it is my own opinion it was blocked by some of the big mining

companies. It may be that through the years they have gained some experience and they have learned a lesson and they will either hang together or they will hang separately, but I think we ought to get in the record, Mr. Chairman—and I am very serious about this, and I think our staff ought to compile it for us—these facts to see what this cost may be to the Government, to the taxpayer, and what it means to the survival of the Nation and the survival of the mining industry.

Senator CHURCH. Senator Carroll, I could not agree with you more, and I think that the kind of facts that you have asked for are basic and that without them we are groping in the dark. I think that the committee ought to undertake to ascertain these facts from the industry.

Mr. REDWINE. We will initiate such inquiry immediately.

Senator CARROLL. If necessary, issue subpenas, because they are operating under a tax statute of the United States. They are operating under many provisions which give blood to their mining arteries, and we are entitled to know these facts in this consideration.

I want to commend Mr. Palmer for a very able presentation.

Mr. PALMER. Thank you, Senator.

Senator CHURCH. I join in that.

Mr. PALMER. May I suggest to the committee that a subcommittee of this committee made a rather extensive study. I think a large sum of money was expended in a more or less complete study of the mining industry, and I am sure that that report is available for the use of the committee. It impressed me very much as a very elaborate study.

May I point out to the junior Senator from Colorado that many of these mining companies have gone abroad with the encouragement of the Government of the United States. They have been encouraged to go abroad to develop the sources abroad, and what I am trying to say here is that if the United States Government has encouraged production abroad by granting concessions, tax concessions and all types of concessions, mutual aid funds, building railroads, building powerplants, building dock facilities, providing cheap transportation in the form of subsidized ships, and so forth, they can adopt a program which will be a realistic program for the continuation of the mining operations within the United States.

Senator CARROLL. That is exactly the point, and while we are going into a long investigation it does not mean that we should not do something to sustain this sick industry until we get a chance to find out what the facts are. Then we can look into those.

I am heartily in accord with the remarks of the chairman, the able junior Senator from Idaho. If we are going to approach this thing in a sound legislative way we have to know what we are doing. If the facts are in other committee records and reports, let us know what they are.

Let me give one concrete illustration and I will not belabor the point further:

We found that in Texas, which has 46 percent of the oil reserves of this Nation, there are 8,000 small oil producers that I never heard of before. I have heard of the major ones, but I never heard of these small ones. The question was what was their access to the

pipelines and how do they function in the area. The question was what was the inducement for the big oil companies to go overseas.

The Government did not have to push them there. The oil was there, and they went into it.

The question was what about the oil that is coming into our country, and what does it do to our economy.

This, it seems, is the same basic principle. So we ought to have our facts.

Mr. REDWINE. Mr. Palmer, is it not true that under our tax statutes an American company with mining operations overseas gets the benefit of the depreciation allowance on its overseas operations as well as at home?

Mr. PALMER. There are certain tax advantages.

Senator CARROLL. The other day I asked that question of a witness, and Senator Malone—I think this is in the record, it was a surprise to me—said that in 1954 the depletion allowance on minerals was confined to the continental limits of the United States. Is that right or wrong?

Mr. REDWINE. That is not my understanding. However, we will develop that.

Senator CARROLL. I want to know about that because I thought seriously sometime back that we confined the limit of the depletion allowance to the oil coming from Saudi Arabia that amounted in 1 year to some $120 million, and, of course, there is another tax statute, may I say, long before the present administration and the preceding one, in 1918, which gives encouragement to American private capital to go overseas, and permits that tax statute as an offset. This is the concept many people feel very strongly about, that, rather than have tremendous contributions in foreign aid, let American capital go overseas and invest, and this is the way to help those countries.

Mr. PALMER. May I suggest to the Senators, if you intend to investigate foreign activity that you gain access to the records of all the international agencies and Federal agencies which have been aiding and sustaining foreign production. I think you will be astounded to find out how much money has been loaned, granted, and given away to encourage foreign production.

Senator CARROLL. Are you referring to minerals, or is this broader?

Mr. PALMER. Just to minerals.

Senator CARROLL. That is very interesting.

Senator CHURCH. I appreciate the suggestions that you have made, Senator Carroll. I think, in the interest of developing a long-term solution to this problem, the facts that you pointed to are indispensable and that the committee ought to be fully apprised of them.

Senator CARROLL. I thank the chairman, and I thank Mr. Palmer.

(The letters referred to by Mr. Palmer are as follows:)

HOUSE OF REPRESENTATIVES,
January 13, 1958.

The PRESIDENT,
The White House.

DEAR MR. PRESIDENT: I am enclosing for your perusal some 200 letters sent to me by my constituents in which they show the greatest concern regarding the affairs of our Government. They state that they are depending on me as their only Representative from Nevada to do everything within my power to trim the budget and cut unnecessary spending. They point out in particular that

they want foreign aid stopped entirely and special mention is made that they would like to see Government-operated businesses terminated so that private industry can have a chance.

I listened intently to your joint message to Congress last Thursday and I noted that you emphasized foreign aid and reciprocal trades in a speech which otherwise pointed out our position in the world today with regard to national defense. Let me state, Mr. President, that I have just completed 5,500 miles within the boundary of my own State and there are unemployed miners everywhere and talking to my colleagues from other Western States, where mining has always been the chief industry, I find the same conditions prevailing throughout this region.

The reciprocal trades, the free-trade policy, and the point 4 program of our foreign aid has completely demoralized a very important segment of our national economy. It was the mines of America that built this country and now with our American tax dollars developing "undeveloped" countries where cheap or slave labor is being used, the minerals from such transactions are pouring back into this country, duty free, and are completely making it impossible for our American miners to compete against this kind of competition. The tungsten mines are all closed. The lead and zinc mines are all closed and copper is on its "last legs."

The refusal of this administration to have a free market on gold has ended this great industry and it is impossible to mine gold at its present $35 an ounce.

Now, all of these various facets of mining have been brought to the attention of your various department heads, including Secretary Seaton (personally) but we have had no relief. I am sure other industries throughout America have also suffered in a like manner regarding the reciprocal trades and this so-called giveaway program. There will not be enough people working to pay taxes if this condition continues to exist and I, personally, humbly implore that you make it your personal concern to look into these conditions on the home front for most of us have already found out that widespread unemployment does exist. We do not go along with the contentions so strongly advocated in your message on the aforementioned issues.

I, for one, will follow the mandates of my people whom I represent, in voting for your many recommendations concerning national defense, but I will oppose free trade, foreign aid, and reciprocal trades for I am in strong accord with the wishes of the people who have to pay the taxes. We in Nevada have gone a long way toward national defense and will continue to do so and I believe we of America want our country strong but if we continue to give away our hard-earned money to unappreciative peoples, our backbone, now bent, will be broken. Surely, 10 years has shown us the impracticability of this program.

I sincerely hope that you and the Director of the Bureau of the Budget will review at least a few of the enclosed letters which will give you an idea of what the "man on the street" is thinking.

Respectfully yours,

WALTER S. BARING,
Congressman for Nevada.

THE WHITE HOUSE,
Washington, January 24, 1958.

Hon. WALTER S. BARING,
House of Representatives,
Washington, D. C.

DEAR MR. BARING: I appreciate your giving me an opportunity to read the enclosed letters received from your constituency over the past several months.

Without attempting a prolonged discussion, I feel obligated to call to your attention that, fundamentally, the position you set forth is self-defeating. It serves no sensible purpose to build up our defenses at huge expense while at the same time tearing them down by permitting the loss of free world nations. The approach you outline would compel withdrawal of much of the most effective striking power that our country has. Thus it would encourage Soviet military adventures that could lead to war. Moreover, I know of no surer way, save national destruction by our own hand, to lose our struggle with world communism than to dispose of our SAC bases abroad, permit our allies to crumble inwardly, dissolve the shield of NATO and other military forces, and invite Soviet imperialism into the vast underdeveloped regions of Africa and Asia. Were such a program adopted by the United States, I am convinced that we

should lose our freedom at home under the pressure of vastly increased defense expenditures; and therefore, we should in the end lose, completely, regardless of our effort.

As for the domestic mining industry, the administration has vigorously supported various measures to maintain its health. You will recall that last year the administration introduced bills designed to assist several aspects of the industry, including lead and zinc. The Congress chose not to act. Therefore, I subsequently urged the United States Tariff Commission to expedite consideration of the lead and zinc industry's application for relief under the escape clause. Having said this, I want to make it clear that it is quite misleading to assign the reason for the difficulties of the mining industry to our country's trade and mutual-security programs. Important pressures affecting the industry today are traceable to the termination of the defense-procurement programs and the slackening of industrial demand. Improvement in general economic conditions, which is expected late in the year, is the only remedy for easing pressure from such basic causes, and it is toward that end that the administration is actively working.

Sincerely,

DWIGHT D. EISENHOWER.

Mr. REDWINE. Mr. Chairman, in view of the colloquy between Senator Carroll and the last witness, Mr. Palmer, in respect to the Buy American Act, at the conclusion of Mr. Palmer's testimony may there be included the applicable part of title III of the Buy American Act, that part that relates to mining, which was passed in 1933, and, following the inclusion of that part of the Buy American Act, may there appear the language of the Stockpile Act of 1946 in which reference is made to the Buy American Act?

Senator CHURCH. Yes. The portions referred to by Mr. Redwine may appear in the record at the conclusion of Mr. Palmer's testimony.

I do think that these portions ought to be included in such form as to indicate the relation between the two provisions.

Mr. REDWINE. I will take care of that.

(The material referred to below follows:)

TITLE III

SECTION 1. That when used in this title—

(a) The term "United States," when used in a geographical sense, includes the United States and any place subject to the jurisdiction thereof;

(b) The terms "public use," "public building," and "public work" shall mean use by, public building of, and public work of, the United States, the District of Columbia, Hawaii, Alaska, Puerto Rico, the Philippine Islands, American Samoa, the Canal Zone, and the Virgin Islands.

SEC. 2. Notwithstanding any other provision of law, and unless the head of the department or independent establishment concerned shall determine it to be inconsistent with the public interest, or the cost to be unreasonable, only such unmanufactured articles, materials, and supplies as have been mined or produced in the United States, and only such manufactured articles, materials, and supplies as have been manufactured in the United States, substantially all from articles, materials, or supplies mined, produced, or manufactured, as the case may be, in the United States, shall be acquired for public use. This section shall not apply with respect to articles, materials or supplies for use outside the United States, or if articles, materials, or supplies of the class or kind to be used or the articles, materials, or supplies from which they are manufactured are not mined, produced, or manufactured, as the case may be, in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality.

(The language relating to the Stockpile Act follows:)

(a) Make purchases of strategic and critical materials with due regard to the objectives set forth in section 1 of this Act and pursuant to determinations as provided in section 2 hereof, which purchases (1) shall be made, so far as practicable, from supplies of materials in excess of the current industrial demand, and (2) shall be made in accordance with title III of the Act of March 3, 1933.

Senator CARROLL. You are going ot develop at a later date this question I put about the depletion allowance with reference to mining?

Mr. REDWINE. Yes, sir; I will advise the Senator in the next day or two as to what the facts are.

Senator CARROLL. Thank you.

Senator CHURCH. Thank you very much for your contribution, Senator.

The next witness to appear before this committee is Mr. Mitchell H. Kline, vice president of the Rare Metals Corporation of America.

Be seated, Mr. Kline. We are happy to have you with us, Mr. Kline. We appreciate your contribution.

STATEMENT OF MITCHELL H. KLINE, VICE PRESIDENT, RARE METALS CORPORATION OF AMERICA

Mr. KLINE. Thank you, Senator.

Senator CHURCH. Have you had far to come?

Mr. KLINE. From way out in the good western country of Idaho.

Senator CHURCH. Days like these in Washington make me very nostalgic for that good old western country.

Mr. KLINE. I know what you mean. I was very depressed the last few days, although I am a former resident of Washington and like Washington very much. But these long foggy and rainy days are a bit depressing.

Senator CHURCH. Mr. Kline, you just feel free to go ahead with your testimony.

Mr. KLINE. I have been with this company, the Rare Metals Corporation of America, since it was organized in June 1954. Prior to that time I was with the United States Bureau of Mines for 13 years, working on their strategic and rare metals program. I have been actively engaged in the mining industry since 1926.

The Rare Metals Corporation of America was organized as a subsidiary of the El Paso Natural Gas and Western Natural Gas Companies to represent their interests in the metallic minerals field. The company's operational office is located in Salt Lake City, Utah, and its executive offices are in El Paso, Tex. As the name implies, the company's major activities are in rare metals.

Being a small and a new company with our major interest in the rare and strategic metals field, it has been our policy to concentrate our efforts toward the production of those critical materials that have markets guaranteed or supported by the United States Government. In my opinion, a small company such as Rare Metals could not survive the competition nor the unstable market conditions that exist in the ferrous or base metals industry. Further, we have felt that we could best serve our national interests in the struggle for survival of nations by producing those metals which have been declared by our Government to be vital for defense.

When the Government announces, as it has on innumerable occasions, that our economy and defense require mercury, uranium, or some other critical commodities, and then offers incentive programs to encourage private industry to enter these fields, it seems to me that the Government then assumes an obligation. Namely, it should make every reasonable effort to foster that venture until it can stand by

itself and not suddenly pull out the carpet from under the feet of those who have responded to their call and invested their capital in these enterprises.

While Rare Metals is presently engaged in the production of both uranium and mercury, I will limit my testimony to our problems in the quicksilver industry.

Rare Metals spent well over half a million dollars in the search for and development of a commercial mercury ore body and in the construction of a reduction plant near Weiser, Idaho. Another 3 years of profitable operation will be required to recover this initial capital investment in the property. No Government financial assistance was requested or given for this venture.

However, the Government's GSA stockpile and price-support program was of great assurance in that the company had a market and a floor price for its product to December 1958. Incidentally, with the exception of one small token shipment, this Government support price plan for mercury did not cost the country 1 dime until December 1957. Since that time all quicksilver producers, including Rare Metals, have had to sell to the stockpile or go out of business. I very much doubt that this industry can stay alive even with this program unless this support price is raised considerably.

While we are grateful for the GSA purchase program, Rare Metals sales to date to the stockpile have been practically without profit, and I believe we are one of the lowest cost producers in the business.

One great complaint the industry has with the program is the confusion and uncertainty regarding purchase procedures and the ridiculous specifications issued demanding precision weighting and packaging in containers which were more costly than those accepted for years by industry and, in fact, unobtainable at the time. The flasks specified for delivery are still in short supply and restrict sales of the metal.

The Rare Metals Corp.'s mines are low-grade, open-pit operations averaging about 3.3 pounds of mercury per ton as compared to the average domestic reserves which contain from 6 to 12 pounds per ton. Even so, Rare Metals' reserves, at the present price of $225 per flask, is about $8.88 per ton of ore as compared to the national average of about $29.60 gross value per ton. Out of this gross value must come mining, processing, transportation, packaging, and marketing costs, all of which are high and getting higher every year. Labor accounts for about 50 percent of these costs.

Compare these operations with some of our foreign competitors whose average grade of ore is 20 to 100 puonds per ton, and, at the same price of $225 per flask, have a gross value of from $59.20 to $296 per ton. With wages only a fraction of the cost of labor in the United States, you can then visualize how insurmountable this problem of foreign competition becomes.

Further than this, most European quicksilver producers are government controlled and price means very little to them except when they can put the American producers out of business, control the market, and sell their low-cost metal at fabulous prices with tremendous profits to the foreign operators.

To give you some idea of the wide variation of labor costs in the major competitive areas in the industry, I wish to quote the labor

costs per day, including fringe benefits, as reported by the American Quicksilver Institute; United States, $20.80; Mexico, $4.80; Italy, $6; Spain, $2; Yugoslavia, $1.50.

I now wish to quote a few paragraphs from pages 516 and 517 in the mercury chapter of Minerals Facts and Problems, Bulletin 556, United States Bureau of Mines, published in 1956:

The Bureau of Mines and Geological Survey prepared data on reserves of mercury and other minerals in the United States as of January 1, 1944. The figures were broken down to show reserves at $100 a flask, at $195, and $300, but only the second and third classes are shown here because no reserves are believed available at the first-named price. Since the date to which the reserve estimates apply, the wholesale index of the Bureau of Labor Statistics has moved up from 67.6 in 1944 to 110.1 in 1953. A price in 1953 of $300 thus would represent more nearly $185 a flask in terms of 1944 purchasing power. (Moreover, since 1943, 180,000 flasks of mercury have been produced by domestic mines.)

S. H. Williston reported in December 1954 that the item of labor makes up half of the cost of mercury mining and that wage rates for miners were only 70 cents an hour in 1938–39, with few if any fringe benefits, but that his company was at present (December 1954) paying $1.89 an hour, with $2 a day in fringe benefits. Other costs, he said, had risen similarly, so that a price of $330 would represent only about $110 in pre-World War II buying power. The Bureau of Labor Statistics wholesale price index (1947–49=100), on the other hand, rose from only 50.1 in 1939 to 110.3 in 1954, or about doubled during the period.

Some of the large mines resumed production in 1951 when the price exceeded $200. Production increases, however, were insignificant as compared with those following the outbreak of World War II, despite the fact that the 1951 average price of $210 was the highest annual price on record; those of $199 and $193 for 1952 and 1953 were far above the range in annual prices ($118 to $196) in World War II. The reasons that output did not again respond to higher prices were partly that higher grade reserves were mined during the war period; that since then the wholesale commodity index had risen sharply, cutting the real price for the metal; and that producers, having witnessed a collapse in prices more than once in World War II, claimed to fear a recurrence of conditions that caused many to lose money in that period. As a matter of fact, the price fell to $193 a flask in October 1953; it then turned upward suddenly and spectacularly in 1954 and reached a new all-time peak of $325 to $330 in October 1954. Factors that caused the scarcity of mercury for sale in quantity lots and the attendant sharp price rise involved to some extent classified activities, such as stockpiling.

But most severely was caused by the influx of foreign metals shipped into this country.

Improvements in technology developed in this country are of equal value abroad. New American-developed furnaces have been installed in both Italy and Spain. Modern mining equipment and machinery are available to all.

Lack of faith in the future of the industry is indicated by the decreases in expenditures for expansion and exploration by the established mercury mining companies. Shortage of capital plays a large part of this decrease. No major United States mercury producer expects to pay any Federal income tax in 1957.

Most of the new work is being done by operators new to the field. Since the price increase in 1951 no new mines have been developed. Several attempts have been made to do so, but these were not successful. Exploration for, development of and equipping a mercury mine is an expensive and time-consuming operation. Probability of price stability and a fair share of the domestic market will encourage more long-range planning and efficient production by United States mining companies.

Sufficient time, money, and effort could be expended on exploration, development, and plant installation to reduce to some extent the high

percentage of loss. Producing companies would have an incentive for additional exploration of new properties, augmenting the work of the Bureau and Mines, and the DMEA in the search for and development of mercury reserves. If offered a fair chance to produce profitably from new deposits, industry can do the work.

I have suggested two things that I think may be of help:

1. The Government should place import controls on mercury that will guarantee at least 60 percent of the United States market to domestic producers.

2. If such controls are at present impossible, then the Government should extend the GSA support-price program through 1962, or until such import control is possible, and increase the floor price to $250 per flask. The Bureau of Labor's increase in the price index between 1944–54 and the Bureau of Mines' estimated cost for mercury production under these circumstances indicate that this price is more equitable to the quicksilver industry.

Senator CHURCH. Would you tell me what the capacity of the domestic mercury mining industry is with regard to the total domestic market for mercury?

Mr. KLINE. I think the last available statistics show that the domestic market was supplying about 2,000 flasks.

Senator CHURCH. The domestic mines are supplying that many?

Mr. KLINE. Yes, out of some 60,000 that are consumed in the United States.

Senator CHURCH. Is that actual market consumption apart from stockpiling?

Mr. KLINE. Yes. In other words, our domestic industry could with the support price maintain itself in the open market and produce about 50 percent of what we need, and, at the same time, would keep a vital defense agency intact.

Senator CHURCH. With respect to the present GSA purchases that are being made by the Government, are these purchases being made exclusively for stockpile purposes?

Mr. KLINE. That is my understanding.

Senator CHURCH. Do you know how close we are at present to the established quota or recognized strategic need for mercury?

Mr. KLINE. We are not anywhere near it. In fact, I think there were eight flasks of mercury sold to the stockpile before December of last year. They were merely sold as a token measure to find out and to make the information available to the public. I think probably since last December they have bought several thousand flasks, but the quota is around 30,000 flasks.

Senator CHURCH. So the situation with respect to mercury and the strategic needs of the country for stockpiling purposes is very different than it is with respect, say, to lead or zinc?

Mr. KLINE. That is quite correct.

In the first place, it is a small industry. It had stood pretty well by itself until these violent market fluctuations ruined the business.

Senator CHURCH. What is the present level of the support price?

Mr. KLINE. Presently $225 per flask as compared with the open market price, which, last week, was at $232 or $236.

Mr. REDWINE. Mr. Chairman, may I interrupt?

Senator CHURCH. Yes, sir.

Mr. REDWINE. As Mr. Kline has testified, up until December there were no offers except for eight flasks, I believe it was. Mr. Williston sold eight flasks just to get a precedent that GSA would buy, for the simple reason that the price had been up as high as $300, and that it was only when the world market price got to the level that had been set by the GSA of $225 that our domestic producers began offering it to the Government, and since then the price has gone up $3 or $4, I believe.

Mr. KLINE. Yes.

Senator CHURCH. So at the present time purchases for stockpiling are not being made?

Mr. KLINE. Some are being made for stockpile and some on the open market.

Senator CHURCH. You may continue, Mr. Kline.

Mr. KLINE. Mercury production is a small but important segment of the defense effort in the mining industry. The Government should protect this vital link in its defense and could do so with a minimum of effort and expense.

Senator CHURCH. Mr. Kline, I want to thank you for coming this morning and giving the benefit of your testimony, and the answers to questions.

Mr. REDWINE. Mr. Chairman, I have just been informed by Mr. Lewis, our next scheduled witness, that he will only need about 15 mintes. Would the chairman permit him to testify at this time? It would, of course, run a little past our normal 12 o'clock adjournment.

Senator CHURCH. Yes.

Mr. Lewis, would you come forward?

Mr. Lewis is president of the New Idria Mining & Chemical Co.

The Senate goes in at 12 o'clock and it may be that I will be summoned by the bells. If I am, you will understand.

STATEMENT OF C. HYDE LEWIS, PRESIDENT, NEW IDRIA MINING & CHEMICAL CO.

Mr. LEWIS. My name is C. Hyde Lewis. I am a graduate mining engineer and president of New Idria Mining & Chemical Co.

I have operated the New Idria quicksilver mine for 20 years. During this time the mine has produced one-fifth of the United States production. This mine was discovered in 1953, and to date has produced over a half million flasks of mercury having a value in excess of $40 million. At the present price it would be over $100 million.

Three times since World War I dumping of Spanish and Italian quicksilver on the United States market has closed down our domestic mines. These shutdowns have a period of 11 to 14 years, and this brings up the question: Will this happen again in 1959?

In this discussion I am relating the history of the New Idria quicksilver mine. However, the history of New Idria follows the pattern of all of the domestic quicksilver mines.

The first time after World War I excessive imports reduced the price per flask from $123 in 1918 to $45 in 1921. New Idria was shut down in 1921 and domestic production was reduced to practically nil.

In 1926 the Spanish and Italian producers formed a cartel and held the price at approximately $120 until 1930. This period was the most lucrative in the history of quicksilver mining in the United States. That is the span between the selling price and production cost was the greatest. During this period many mines were opened up, reduction plants built, and domestic production was greatly increased.

The cartel selling quota was based on the percent of total production from each member. This created large inventories, and in 1931 the cartel was dissolved, reducing the price to $57 in 1932, and again, for the second time, all of the domestic producers were forced to shut down.

New Idria closed down in 1931, and did not reopen until I started opening up the mine in 1936 when the price had increased to $80. Tunnels had caved in and several years were necessary to open up production areas. When Word War II broke out, new ore bodies had been opened up and New Idria had the highest production in its history.

Again after World War II, for the third time, excessive imports hammered the price down below $100 by 1946. New Idria held on until 1949 by mining available ore and by not developing new areas.

Due to the Korean conflict, the price jumped from $81 in 1950 to $210 in 1951. Like New Idria, most of the domestic mines had exhausted their available ore and had shut down.

Capital remembered the 3 periods the mines were shut down in last 30 years due to dumping by Spanish and Italian producers, and it was difficult to raise money to reopen quicksilver mines. Government help with Defense Minerals Exploration Administration loans for exploration, and the floor price of $225 established in 1954 has been a great help in opening up quicksilver mines and establishing an industry that is now producing at a rate of over half of our domestic consumption.

New Idria has received from the DMEA $333,000 and has paid back from ore developed $200,000. The remaining $133,000 can easily be paid back from ore already blocked out if the price of quicksilver remains over $210, our present break-even point.

Spanish and Italian mines have recently installed modern up-to-date reduction plants which will increase their production. They are now producing more than they can sell, and are selling in this country at lower prices than elsewhere in the world. This price is slightly below the Government buying price of $225.

Will Spain and Italy then supply all of our consumers through 1958?

Senator CHURCH. May I ask is the Government buying price of $225 a fixed price or is that the established maximum that the Government can pay?

Mr. LEWIS. It is a fixed price. It was extended from 1957 for 1 year through the end of 1958 to purchase 30,000 flasks in the United States at the fixed price of $225 a flask.

Senator CHURCH. Thank you.

Mr. LEWIS. A major share of the domestic production is currently being sold to the Government, and when this program is completed in December 31, 1958, the price will inevitably go below the domestic

cost of production, and, again, all of the domestic producers will be forced to shut down. This will then make this country fully dependent on foreign sources that may or may not be available, or only available at their own terms and price.

I have mentioned the difficulty of interesting capital in quicksilver mines, and this means that incentives must be given by the Government due to flooding by imports with the resultant fluctuation in price. There is also the question of labor. It is difficult to obtain trained miners. Labor is turning to other occupations because of lack of security within the industry. Many of the men recently laid off due to low prices of copper, lead, zinc, tungsten, and other metals must leave mining camps and look for a livelihood in other industries, usually in cities. Very few of these men return when the mine reopens and the operator must train inexperienced men.

The majority of quicksilver mines in this country occur on or near faults in ground that is mashed and require timber support and continued attention. When New Idria was forced to shut down in 1950, underground maintenance amounted to over $5,000 per month.

I have been in the quicksilver industry since 1928 and have visited many of the operating plants. I have also examined many prospects and mines that have failed due to quicksilver content being too low to make a profit at the current selling price. Higher prices would open up many new mines and give the United States larger reserves to draw on in emergencies.

In regard to the nature of ore bodies, the grade or tenor of the ore is generally not constant. In other words, there are areas of high-grade ore and areas of low-grade ore. A good mine operator tries to blend these to obtain full benefit of the ore body. This also is making full use of our domestic resources.

When mine operators have no assurance of price, or when prices drop drastically due to flooding of the markets by imports, they are forced to mine only the richer ore and stop development work. This leaves the low-grade ore in the mine, and this ore will not carry itself financially unless the price per flask reaches extremely high levels. Even today, with the price of mercury at $225 per flask, the operators are forced by economics to leave low-grade ore in the ground. If the price of mercury were $300 per flask most of the mineralized ground could be mined with a resultant increase in production and reserves. There are a number of lower grade properties in this country that could be operated if the price per flask were higher and there was some assurance as to the future of the industry.

To illustrate the preceding statement, the following figures, taken from our own production costs, illustrate the break-even point. The break-even point per flask is as follows: for 8-pound-per-ton ore, $276; for 10-pound-per-ton ore, $240; for 12-pound-per-ton ore, $200.

For the welfare of the country, which today is practically at a wartime status, the Government should take action to assure the continuance of a healthy domestic industry by taking steps to avoid having a recurrence of the shutdowns caused by foreign imports. In time of emergency this production is the only one on which we can safely depend.

As I have stated previously, it takes time, work, and a lot of money to reopen and develop mining properties, and, as we are all aware,

time required for production in event of an emergency has been reduced to practically nil.

The present tariff on mercury imports is 25 cents a pound. This tariff has been in effect since 1922 and has not been changed since that date even though the price on which it was originally imposed was $1 per pound and the current price is in excess of $3 per pound. Thus today we have only one-third of the protection afforded us in 1922, and this situation is more difficult since labor and equipment costs have soared and the grade of ore declined.

We believe that if the domestic quicksilver industry is to be maintained in a form readily available to meet the normal needs of our economy and be in shape to rapidly expand in time of national peril that more adequate protection should be provided. We suggest that such protection could take either of the following forms:

1. An increase in the tariff rate from the present 25 cents per pound to 75 cents per pound.

2. Establishment of a quota on imports limited to 40 percent of the United States consumption of quicksilver in 1957.

Senator CHURCH. May I ask how much a flask weighs?

Mr. LEWIS. 76 pounds.

3. Imposition of an excise tax of 75 cents per pound on all quicksilver imports when the average domestic price for any calendar month falls below $250 per flask as reported in industry publications.

Adoption of any of the above-suggested remedies, in my opinion, would create a firm foundation for a domestic quicksilver industry.

Since we realize that this facet of a long-range minerals program may take some time to become effective, we earnestly urge that the Congress extend the current domestic mercury program for an additional year on terms no lower than at present.

I do appreciate the opportunity of presenting my views as to the needs of one of our most vital industries to this committee, and sincerely hope that you will give them your favorable consideration.

Thank you.

Senator CHURCH. I do not believe I have any questions. Your testimony has been very, very clear and I appreciate it.

Mr. LEWIS. Thank you.

Senator CHURCH. This will conclude the hearing this morning, and the hearing will resume at 2 o'clock this afternoon.

(Whereupon, at 12:10 p. m., the committee recessed until 2 p. m. this same day.)

AFTERNOON SESSION

Senator CHURCH. The hearing will come to order. This is a continuation of the hearings that commenced at 10 o'clock this morning. We have two witnesses scheduled for this afternoon.

Before we call the first witness scheduled Mr. Redwine, of the committee staff, would like to make some preliminary observations.

Mr. REDWINE. Mr. Chairman, I understand the testimony from these two witnesses this afternoon will be rather technical in nature. Mr. Broadgate, who is mineral consultant to Senator Murray, is much more conversant with the technical nature of manganese, the metallurgy of it than I am. I ask Mr. Broadgate to act as consultant in my place. I will be available.

Senator CHURCH. Mr. Redwine, I will miss your good services but I am glad to have Mr. Broadgate's assistance because certainly I am no specialist in this field. I will have to rely on Mr. Broadgate's experience.

The first witness is Mr. John C. Udd. Mr. Udd, would you come forward?

STATEMENTS OF JOHN C. UDD, PRESIDENT, STRATEGIC MATERIALS CORP., AND ROBERT A. BLACKBURN, KOPPERS CO., INC., PITTSBURGH, PA.

Senator CHURCH. Let me welcome you to the committee and express the appreciation of the committee to you for coming today.

Mr. UDD. Thank you very much.

Senator CHURCH. Do you have a prepared text, Mr. Udd?

Mr. UDD. No, I do not.

Senator CHURCH. Feel free to proceed as you see fit.

Mr. UDD. Thank you.

Mr. Chairman, my understanding of the reason for being here is to explain something with respect to work that has been done by us and our organization in the nature of beneficiation of low-grade minerals and ores.

First, I might give you a brief explanation of who we are.

Senator CHURCH. May I suggest for the purpose of the record that you identify yourself and your company and give any information that may establish your professional credentials.

Mr. UDD. Firstly, I happen to be president of Strategic Materials Corp., a New York State company created in 1951 by a group of industrialists in the concept and realization that the beneficiation of low-grade minerals was a matter before us in the near future and in the objective to exploit and develop two basic methods in the processing of low-grade minerals.

The company in pursuance of that quest, acquired the two basic processes in ore beneficiation to which I will refer later, one of them being in the nature of reduction of minerals in a pyrometallurgical process and the other being in the nature of self-cycling leach process for the leaching out of certain soluble minerals.

Without getting into detail the company, during the years, designed and built a prototype production plant, a small production plant around the pyrometallurgical reduction process for the purpose primarily of determining first the technical phase and secondly the economics of the generation or development of ferromanganese from low-grade manganiferous ores or low-grade manganese ores and further for the utilization of that plant for the same purpose in the treatment of chromite ores and in lateritic ores, offgrade ores of every nature that would lend themselves to pyrometallurgy, and in doing so as I state built this fairly large plant at the cost of some $2 million plus and spent in addition a considerable sum in processing ores from various locations.

Concurrently we acquire a research plant in Niagara Falls, N. Y., in order to carry out the analytical data associated with the general research work.

In the course of our operations, we had acquired a low-grade manganese deposit in New Brunswick, very similar in nature to that in Aroostook, Maine.

We acquired it because in the nature of carrying the process into development if it were successful we wanted an ore body around which to submit the process. That is only incidental to what I have to say here today, incidental because we have the ore from that source to carry through processing at our plant in Niagara Falls.

Now, I might get down to events of today and I am going to leave for the record descriptive information as to the company itself, its background, and the nature of the work we have done so that it is not necessary, I presume, to take your time on that.

Senator CHURCH. Do you have that information handy?

Mr. UDD. Yes.

First, there is a descriptive statement of the company.

By the way, that recites the personnel of the company as well.

Secondly, there is a statement of the objectives processwise in typed form as of now.

Senator CHURCH. Rather than include this in the written record, we will accept this information for the committee files where it will be available for the committee if needed.

Mr. Udd, go ahead with your testimony.

Mr. UDD. To bring it up to date with as few words as necessary, our pyrometallurgical plant was completed a year ago in January, leaving a very short interval in which to carry out proof of the basic pyrometallurgical process reduction, direct and selective.

In that time we, of course, had the national problems that go with the development of a plant around a completely new concept which this happens to be.

We did get settled down in the development of the processing along in the spring of last year. Since that time we have carried out successfully, certainly from the technical aspect and quite definitely from the economic aspect, the application of the process for the production of ferromanganese ores dependent, of course, always upon the contaminants within the ore and the availability of power for the purpose since the process is developed around electric energy.

We ran some 2,000 tons of material and I repeat and emphasize that the plant is not a pilot plant in the ordinary sense but it is a small production plant and hence the evidence obtained is in the scale and numbers normally higher than that of the ordinary pilot plant.

We also ran the iron reduction phase, and of course there is a relationship between them, and developed and determined the ability to utilize offgrade iron ores for the direct production and, I might say which may surprise you, the direct production of mild steel rather than pig iron.

We can produce the pig or mild and can use the offmagnitoid ores of which we have much in the West and much in the Adirondacks and many sources on the continent primarily only useful as titanious sources.

We can develop those ores for the purpose of iron and steel production for the iron content as well as the titanition although our approach has only been in respect to iron recovery as steel.

Senator CHURCH. This processing, as I understand it, then, involves the use of the low-grade ores into finished pig iron or mild steel?

Mr. UDD. Into the useful product.

Thirdly, we have in the interval run lateritic ores which I believe is of great importance to this country.

The laterites are a source of nickel. They are also a source of chrome. We have run lateritic ores to produce ferro nickel, mild steel, and ferro chrome from the same ore which has never been done before. We are satisfied that it is an economic process.

Senator CHURCH. When you say "an economic process," can you give the committee some comparison between the costs entailed in the use of these low-grade ores with your process and the costs that would be entailed in the normal process of high grade ores?

Mr. UDD. First, I might point out, starting in the order of the ores I have named: Low-grade manganese ore. Up to this point there has been no economic method to our knowledge to convert low-grade manganese into a useful product. There have been, referring to the iron reduction, many attempts and there are many methods for the purpose but to my knowledge there is no method that will successfully treat offgrade iron ores to produce mild steel and, thirdly, there is no method to my knowledge that will economically recover the three principal constituents of lateritic ores: ferronickel, ferrochrome, and steel.

There are processes to produce the nickel by way of sulfuric acid leach but that leaves the iron and chrome.

Ours is a process by which we recover all and interestingly is a process by which each of those three components essential to the stainless steel in proper proportion can be added for the production of stainless steel.

I state as my belief that it is going to be a very interesting new method to reduce the cost of stainless steel particularly because we have abundant quantities of laterites on the west coast in Oregon and California, and in Cuba and in the Philippines, all areas of interest to us.

That process has been proven beyond a question of a doubt. It has been observed and checked by important independent engineers. Evidence is available to substantiate at least to a large degree if not fully what I have said here.

In addition to that we have run and are continuing to run the process in the application to the production of ferrochrome from the low-grade chromite ores. We have worked in small scale with some chromite ores from the Western States. We have worked in larger scale with some chromite ores from Canada.

We have, as you know, 2 or 3 fairly large deposits of offgrade chromite ores on this continent, one of which is in Canada and two in this country. Hence, we endeavored to obtain testing samples from all three sources.

We have succeeded in providing ferrochrome from low-grade outgrade chromite ores by the method of selective reduction. The economics with respect to the application of the process in production of ferrochrome in the Canadian ores is not yet certain. We believe the economics are going to be good but we do think more certainly that the process is economic as applied to the United States ores, particularly the deposit in Montana and the one in Oregon.

Quite apart from that and of interest to you since you have asked me to state the matters of interest, we have worked with a number of ore sources in manganese from the United States.

We have in small scale, because our large furnaces were not available at the time, carried through the operation in an attempt to produce ferromanganese from the Government stockpile successfully.

I should qualify that in this respect: successfully from a technical point of view without a doubt. We were not able at the time because of lack of equipment to prove it from a commercial point of view economically, but from the numbers and data that we have obtained we have no doubt as to the economics, the question there being only the cost of the material for the purpose of producing the ferromanganese and again the big and important item, the availability of power for the purpose.

I think that is, broadly, pretty well the application in respect to the one phase of metallurgy.

The other that might be of interest is in the development of the leach process that I referred to for the more economic and more complete recovery of soluble minerals through the sulfuric acid attack. That applies very importantly, we think, to the near complete if not complete recovery of copper, lead, and zinc from massive sulfide ores, bypassing the conventional concentrating methods, reverting to the old Ross leach method but with a method that has been unsuccessful in the past because of economics but overcome in a large degree in our situation by our method through the fact that we can recover the acid and hence bring it to a more economic stage if not successfully.

We are carrying that into pilot now. Of course, that has important bearing.

Senator CHURCH. Would you have any objection to our calling Mr. Blackburn to sit with you?

Mr. Blackburn, would you come up, please, and join with Mr. Udd?

Will you state your name and identify yourself for the committee for purposes of the record and then you both will be available for some questions that members of the committee staff would like to ask.

Mr. BLACKBURN. My name is R. A. Blackburn. I am from Pittsburgh and with the Koppers Co. in an engineering capacity.

We at Koppers have been associated with Strategic Materials Corporation in their Niagara Falls, N. Y., and Ontario plants for the past 6 months.

Our company's interest is in our engineering and construction division. We engineer and construct steel plants and we looked into the Strategic Materials Corporation with the idea that we would evaluate the process as a possible diversification of our engineering and construction business.

I think that states our position.

Senator CHURCH. Fine.

Mr. BROADGATE. May I ask some questions?

Senator CHURCH. Certainly.

Mr. BROADGATE. Mr. Udd, the committee, as you probably know, is very much interested in the beneficiation of Government stockpiles of low-grade materials in GSA inventory stockpiles and, of course, continuing the production of low-grade materials, low-grade manganese, low-grade chromes.

I think you said that you had checked the GSA stockpiles of manganese for its amenability to beneficiation by your process.

Those stockpiles, as I understand it, run about somewhere between 20 and 22 percent.

Do you suppose that if a plant, say, centrally located in the Deming-Wenden-El Paso area could handle those stockpiles and you could get some sort of deal from ODM to release them commercially and permit mining to continue there using the stockpiles as a backlog that that would stimulate new mining in the area?

Mr. UDD. That is a rather broad question to respond to without a fairly lengthy statement.

We believe, first, economically that we can convert the present stockpiles into a useful commodity, ferromanganese.

I stand on that as a statement.

Then I go on with this as my concept: I do not think there is going to be any other successful method of conversion other than pyrometallurgy, such as we propose, because any beneficiation by other means is going to result in loss of contained manganese.

Mr. BROADGATE. You are familiar with the Dean Lute and Nossen process that General Services has spent a lot of money in developing?

Mr. UDD. Yes, to some degree.

I suggest that any pyrometallurgical process if successful should be more economic than a pretreatment of the material because the end result is going to be the requirement for pyrometallurgy in any case unless you go to the manganese oxide as an oxide for that purpose.

I think that the response to your interest in the stockpiles in any consideration of ODM or GSA could best be answered by the fact that we did visit GSA and ODM some 2 years ago to generally discuss the possibility of conversion of the stockpile as to ferromanganese following which a carload of the material presumed to be representative was shipped to us at Niagara Falls, N. Y., by GSA or ODM and an analysis of that brought out the manganese content to be unblending, which is apparently a requisite of the material at approximately 30 percent manganese content. It ran beautifully so far as our process was concerned from which we developed within our own minds certain opinions and approaches.

Mr. BROADGATE. This is the material in the Southwest?

Mr. UDD. Yes. I do not recall at the moment although Dr. Udy could probably tell you whether it was a blend of the 3 stockpiles in the Southwest or from 1 single stockpile or the 2. I know it came from the Southwest.

Mr. BROADGATE. If I direct any question to you that you think Dr. Udy should answer, instead, please let me know.

It is my understanding that the stockpiles at Deming and at Wenden average somewhere around between 20 percent and 22 percent and at Butte and Philipsburg in which Senator Murray is particularly interested, they are about the same. Some of the Butte ores are rhodocrosite, however.

Would that make any difference in the process in the Butte stockpile?

Mr. UDD. To my knowledge, I do not believe it would.

Mr. BROADGATE. Is there enough ore in the three stockpiles at El Paso, Deming and Wenden to warrant putting up a plant just for running the stockpiles themselves?

I understand that there are somewhere around 1,200,000 tons of raw material, running 20 percent or 22 percent at Wenden and Deming and somewhat higher than that at El Paso.

Are you also anticipating restimulating the low-grade mining in those areas?

Mr. UDD. Our approach was with respect to utilizing the stockpiles for the purpose of developing of initial plant, building a plant, and even endeavoring to obtain as much payout on that plant as possible from the stockpile conversion.

Subsequently, we would utilize that plant for continuous production for the low-grade manganese ores in Arkansas, Colorado, and the Southwest generally.

Mr. BROADGATE. You do believe, then, that it would restimulate the mining, reopen the shutdown low-grade mines through those areas?

Mr. UDD. I do think so and I think more particularly it would open new mines.

Mr. BROADGATE. That is what the committee is very much interested in particularly at this time.

Is there enough managanese in the Philipsburg-Butte stockpile to warrant putting up a plant?

Mr. UDD. I doubt that there would be as a single plant because my understanding is that there is about 300,000 tons which, in itself, would not be adequate to payout a plant except only if a small-scale plant were built.

Mr. BROADGATE. Then would it be economic?

Mr. UDD. That would have to be studied.

Senator CHURCH. I do not know how far your studies have gone in this connection, but have you compared the electric rates that would be obtainable in Montana with those that would be obtainable in the Southwest and what importance would this factor have in the plant?

Mr. UDD. Well, the cost of power is an important factor but we consider this in the range of power at 4 to 6 mills being an economic range dependent upon the grade and conditions of the ore and other factors involved.

Mr. Blackburn would probably wish to make some comment in that respect.

Mr. BLACKBURN. Well, starting with just a small amount up there in Butte, I do not believe that you could run that economically and, as far as the power, generally, is concerned, the process has to have power and, I believe, from the figures we have made, it should be under 1 cent. Perhaps 7 mills would be a good figure. I am not familiar enough with the territory out there to know where the power sources are but I think that in the Northwest it is easier to obtain the power in that range.

Senator CHURCH. Yes; the likelihood would be that the cheapest power would be available in the Northwest but if the process is economic at rates up to 7 mills, you should have no difficulty in the Southwest either, I should think.

Mr. BLACKBURN. I think that in this case it probably would fit either place because from our preliminary studies and this is, of course, based

on the work that was done on New Brunswick ore, which is similar to the Maine ore, we will have to have power around 7 mills.

Mr. BROADGATE. Could you operate at the grades that are available at Artillery Peak and Aroostook?

Mr. BLACKBURN. We can operate at those grades but they do need some beneficiation. It is not the kind of beneficiation that you would ordinarily think of as in connection with manganese ores.

Those ores usually run around 10 percent or 11 percent manganese, 9 to 11 percent, say, they can be beneficiated to around 15 to 16.

Mr. BROADGATE. Mechanically?

Mr. BLACKBURN. Mechanically. That would be a very low grade ore in the ordinary sense but it is high enough grade for the process that has been developed.

Mr. BROADGATE. I understand that the Manganese Chemical Co., using the Dean Lute process in Minnesota is making battery grade manganese from about 9 percent ores.

Are you familiar with that operation?

Mr. UDD. Generally so, yes.

Mr. BROADGATE. You can make battery grade ores or ferro?

Mr. UDD. Well, manganese normally would be made through a furnace.

Mr. BROADGATE. I was thinking of your leaching method. I understand that the Dean Lute method is leaching.

Mr. UDD. We have actually made outside manganese sulfate through the leaching. In connection with the stockpile materials and also in relation to the market generally, the great market is in the field of ferromanganese.

If you do not mind, I would like to mention something that has been in our minds. We do not think it is wishful thinking. We think it is an interesting possibility and consequence because of the basic fact that this process and the equipment involved is adaptable in the same plant to production of ferromanganese or ferrochrome or the treatment of manganite ores.

Once you have thought of that and considered further that in the State of Montana there are chromite ores and also the manganese stockpile, it is conceivable, not certain but conceivable, that a plant of this type checked out first as to ores available and as to economics pertaining to the ores—which is also a requisite—could be a continuous operation in the utilization for ferromanganese and ferrochrome and iron ore, mild steel, when other ores were not available.

I would like to suggest that that has the possibility only because the plant would not have to stand on one foot.

Mr. BROADGATE. You say you have approached ODM with the idea of working out a deal with them for the manganese stockpiles. Have they shown any particular interest?

Mr. UDD. Yes. Following a meeting here of some 2 years ago while we were running the concentrates from the Southwest, two engineers from the Bureau of Mines did visit our operation at Niagara Falls to check into the process in small scale because our large plant was not then available.

Following that we had no contact until last year about this time, perhaps a little earlier, at which there was some renewed interest and following which we made a suggestion that we acquire the stockpile ores and convert the ores into ferromanganese product. We sug-

gested the higher grade ferromanganese products, the low and medium carbon, because of the cost of the concentrates, but there has been no further reaction.

Mr. BROADGATE. Mr. Udd, would it be exposing a trade secret to ask what you offered ODM for those stockpiles per unit of manganese? We have some idea of what they paid for them. They paid about $1.70 a unit.

Mr. UDD. I wonder if it would be appropriate for me to mention that.

Mr. BROADGATE. Perhaps it might not be. The reason I asked was this: The committee is interested in continuing the mining. You said that that could probably be done. Unless an appropriate amount could be paid to the miner for his ore you could not reopen those low-grade deposits.

Apparently on the 20 percent stuff, which is about average through the Southwest and up in Montana, at the present time the operators did not get too rich at the Government figure of $2.30 minus penalties with the average of somewhere around $1.60, $1.70.

It seems that, unless you could be prepared to offer some amount in that neighborhood for newly mined ores, you just would have the stockpiles to run and no new mines operating.

Mr. UDD. Well, as a matter of economics in that respect one cannot afford to pay more per unit for low-grade ores nor as much per unit for low-grade ores as one could obtain the same ores for in high grade.

Mr. BROADGATE. As a matter of fact, as you know you can buy 48 percent, 50 percent stuff at the port of entry for somewhere around $1.40, $1.50. The market fluctuates but apparently the domestic miner cannot operate at that price and he is mining 20 percent.

I am just trying to get to the economics of continuing the maganese mining operations.

If, for example, the ODM was persuaded to let you have the GSA stockpile at a reasonable figure so that you could put in a plant and perhaps amortize it from the proceeds from the stockpiles themselves, could you continue and stimulate mining through those areas?

Mr. UDD. We certainly could not afford to pay $1.45 a unit for low-grade ore and compete with standard and conventional processes for the production of ferromanganese. That has not been our concept.

We believe that there are sources of ore in the Southwest from which manganese ores could be obtained at much less cost than $1.65 or $1.45 a unit and at low enough cost to support a plant economically.

Mr. BROADGATE. What is your idea of the per-unit cost to you that would be necessary?

Mr. UDD. That is a relative subject because it depends upon the cost of power and the cost of transportation and many other factors.

You might ask then about the per-unit cost delivered at the plant. That again has a relative factor.

Mr. BROADGATE. You must have studied those things or you would not be making ODM a proposal.

Mr. UDD. We did to a limited degree, sufficient, however, for our purposes. We are making a restudy at the moment to be more certain of lower-cost sources than we had evidence of.

Mr. BROADGATE. Looking into the chrome situation, of course you have an eye, as a good many other people have, on the chrome stock-

pile at Nye. That material runs somewhere around 40 or 41 percent, I believe, and undoubtedly would be nice to handle. But what could you do with the eastern and northwestern chromes?

Mr. UDD. Well, in the case of the Nye, Mont., situation, we have run the concentrates in our small production.

Mr. BROADGATE. I know you have.

Mr. UDD. The interesting phase of that is that it appears and I think we, from our point of view, are certain that the ore itself is actually as good a furnace feed as the concentrates if not better because we discovered that we had to add the tailings back to the concentrates to produce ferrochrome.

The ore is self-fluxing as such. We believe that ore is a source of good material.

Mr. BROADGATE. How about the chromes that I was speaking of in northern California and Oregon?

Mr. UDD. I am not too familiar with those.

Mr. BROADGATE. You have done no work on those?

Mr. UDD. No.

Mr. BROADGATE. The chrome miners there are also bothered by the fact that the Government program might run out, and some private operation to keep them running would be very welcome, I am sure.

You mentioned offgrade iron ores. Just what do you term offgrade iron ores?

Mr. UDD. Contaminated iron ores for normal blast furnace treatment contaminated with manganese chrome, high sulphur, high phosphorus or more particularly high titanium.

Mr. BROADGATE. You were not referring to the grade?

Mr. UDD. No, I was not referring to grade although, subject to the cost of power, this process will produce mild steel from low-grade ores as well. In other words, there is a cutoff point somewhere as to economics but it is quite evident that a 4½- to 5-mill power at 40 percent ore or 35 percent ore might be sufficient for economic production of mild steel depending upon locality and other factors.

Mr. BROADGATE. Have you surveyed any iron deposits of sufficient magnitude outside of the well-known large deposits in Minnesota that would satisfy your purpose?

Mr. UDD. Well, we have examined into several on the North Shore in Canada, particularly because of the future posible programs we see.

Mr. BROADGATE. I am thinking of the United States.

Mr. UDD. I am coming to that. We have not investigated the circumstances in western United States although we are starting to look into the situation in Wyoming where there appears to be a substantial titanium deposit.

We have also had engineers on two occasions in the west coast, in California, Oregon, and Arizona, checking into iron possibilities. There appear to be more than the one situation to which I just referred.

Mr. BROADGATE. I know that there has been quite a little conversation at least about some discoveries in Arizona; and in Montana there has been a lot of drilling on the Montana iron ores; and I understand that very substantial ore bodies have been drilled out.

Have you looked at those?

Mr. UDD. No; we have not as yet. We are in the process of doing so.

Mr. BROADGATE. What is the economic limit on the iron ores as to grade percentage?

Mr. UDD. That is subject to the ancillary problems, the cost of power, flux, transportation.

Mr. BROADGATE. I realize that. The reason I asked that question was that you must have made some cost surveys and know approximately within what limits you can operate.

Mr. UDD. We have.

Mr. BROADGATE. Whether you can use 20 percent or 40 percent as a reasonable figure.

Mr. UDD. We have but one cannot generalize too much in that field. You can only be specific with respect to a certain set of given facts; the location, the flux, availability, the power cost, your product, your total production because production has a large bearing on cost as related to size. It is a whole lot cheaper to produce a thousand tons of a product today than a hundred, you know.

All of those things have to be taken into account around a special set of circumstances.

Mr. BROADGATE. I am quite familiar with that, Mr. Udd, as almost anyone is who has been dealing with the industry for a long time from the engineering standpoint.

I was in hopes, however, that you had gotten to the point of making some specific studies in specific areas where we could get down to brass tacks and have an idea of what you might be able to actually do.

Mr. UDD. I could respond to that in better form than I have by a specific example: This is practicable to the higher iron bauxites of Oregon where our combination direct reduction and sulfuric acid leach process as applied has been studied. The figures I am going to give you are figures that we believe to be correct; still to be verified through pilot in substantial scale, but carried out through small and intermediated a great deal from other work done on a large scale.

We believe that we can produce mild steel at a manufacturing cost from the higher iron bauxite in the first phase at a cost in the range of $50 a ton assuming power at 4 mills, because we had to take that base and starting with the grade of 16 percent iron contained in the high iron bauxite. That is getting pretty close to what is good economics on a low-grade material.

Mr. BROADGATE. It certainly is low-grade material.

I suppose that Dr. Udy will cover the technical work that has been done on the leaching process for copper, lead and zinc.

Mr. UDD. He is much better equipped to do so than I.

Mr. BROADGATE. You are probably equipped to tell us how far you have gone with your experimental work along that line.

Mr. UDD. Yes. In the field of alumina—and that is particularly interesting at this point because I have just referred to high iron bauxites and bauxites are a source of alumina—we have done a great deal of lab scale work and have carried it to the point where we have full faith in the process as a base applying to high iron bauxite with the byproduct credit production of mild steel or iron plus the recovery of alumina.

In the development of that we have associated with North American Coal of Cleveland and through the very fact that we did run at their suggestion the waste coal shales, the strip coal waste from the Marietta, Ohio, district which scales contained 20 to 25 percent alumina, we have in lab scale successfully produced a good grade alumina from low shales.

The process revolves around the sulfuric acid leach and recovery of the acid. Hence, if carried into production scale based upon knowledge that we know today and assuming that all is checked out and verified by pilot which we are now going into, it should be a very economic process for the recovery of alumina from many waste or offgrade or low-grade materials including iron bauxites.

Generally, that sulfuric acid leach attack and method as developed would be applicable to production of alumina from strip coal shales or high alumina clays from the Southwest, but also applicable to the more economic recovery of lead and zinc and copper from what might be marginal ores at the present time by virtue of the fact that except for primary beneficiation costs where necessary it would pretty well bypass a great number of the problems existing today in converting to a specific grade in smelter technique.

Mr. BROADGATE. What processes to use for handling complex ores has been an interesting subject for a number of years.

The industry has hoped that somebody would come along with an economic wet method to beneficiate complex copper-lead-zinc ores. You feel that you have gotten your process to the point where you can actually take complex ores and make a commercially marketable product at ordinary market prices?

Mr. UDD. Yes. I would answer that in just that form. We believe we have.

Mr. BROADGATE. The committee is very much interested in titanium. You mentioned somewhere in your testimony that you had done some work on titaniferous ores. Can you carry the work through or have you carried the work through to making metallic titanium?

Mr. UDD. Not to that extent. We have carried through to the recovery of TiO_2, titanium. We have not gone so far as to endeavor to develop a method to produce lower cost titanium.

Mr. BROADGATE. Of course, that, as you know, is the big problem today in the titanium industry, the cost of sponge, and the eventual cost of mill products is so great that it restricts its use very considerably for industrial purposes.

The committee would certainly be interested in a method that would produce titanium metal very much more cheaply than at the present time.

The committee has made many studies of the titanium industry and feels very strongly that a low-cost method of making titanium metal would stimulate its use terrifically.

The price is way out of line for commercial purposes. The military, of course, have stimulated its production for military purposes and cost has not been such a factor.

I wonder if you have given that any particular consideration?

Mr. UDD. We have. I have held and expected to hold to a statement as to what we knew we could do rather than delve into the field of what we think might follow from these processes. I think that

requires an explanation. I do not want to create the impression that we have a multitude of processes. We have not. We have 2 or 3 basic processes all of which have adaptations to a broad field. Hence, when you think in terms of processes one should not get the impression that this was a multitude but rather a multitude of applications. We do believe that we have an adaptation through this technique for carrying through to the recovery of the tetrachloride of titanium rather than the oxide in direct furnacing operation. To some degree that has been carried out on a test basis. That, in itself, would be a marked step in the reduction of the cost of the ultimate product.

Mr. BROADGATE. Yes. The cost of titanium tetrachloride is a very important factor in the production of sponge.

Mr. UDD. But in that case we have no evidence as to economics, we have not carried it through beyond the small-scale furnace attempt to see whether or not it might be feasible.

We think it is but we cannot prove it today.

Mr. BROADGATE. I think that is about all I have, Mr. Udd.

Mr. Blackburn, do you have anything that you would like to add?

Mr. BLACKBURN. No, sir. Perhaps, though, I might discuss the furnacing experiments or prototype operation.

Mr. BROADGATE. That would be very interesting.

Mr. BLACKBURN. We ran it from about the end of October until the end of last year, to the end of December.

Using as a starting material the New Brunswick manganese ores, low-grade manganese ores, we were able to produce several products. We were able to produce on-grade, high-carbon ferromanganese and silica manganese, and we also produced a medium carbon ferromanganese. We had as a byproduct a high-phosphorous pig iron.

One of the interesting points in the treatment of such ores as the Maine ore, Aroostook ore, and the New Brunswick ore is the fact that it contains phosphorus and, as such, it is quite difficult to separate by ordinary means.

Mr. BROADGATE. Do you happen to know if the Artillery peak ores are similar to the Aroostook ores in that respect?

Mr. BLACKBURN. I am not aware of that.

Mr. UDD. No; they are a lower grade, different type of ore.

Mr. BLACKBURN. However, we were able to successfully produce the products. We are in the process of compiling all of the data from the plant operation.

We have made some economic studies that indicate that the cost of production of high carbon ferromanganese by this process is somewhere around $150 a ton using as a starting point the Aroostook ores.

We have not yet finalized the design of the plant but we have established all the criteria for the design, so that, in the case of manganese ores that are contaminated with iron, for this process that is very beneficial because we can get an iron credit as well as a ferromanganese credit. Therefore it enables the use of the lower grade ores.

I thought that might be of interest.

Mr. BROADGATE. It is of interest. Do you have anything more to add, Mr. Udd?

Mr. UDD. No, sir.

Senator CHURCH. Thank you, gentlemen.

I would like to call the next witness who is scheduled to testify this afternoon, Dr. Marvin Udy.

Doctor, won't you sit down? We appreciate your coming and it is the understanding of the committee that you are one of the leading metallurgists of the country and speak with great authority.

Mr. UDY. Well, I would not say that.

Senator CHURCH. We are happy to have you.

STATEMENT OF MARVIN UDY, VICE PRESIDENT, STRATEGIC-UDY METALLURGICAL & CHEMICAL PROCESSES, LTD.

Senator CHURCH. Dr. Udy, please identify yourself and proceed as you see fit.

Mr. UDY. My name is Udy, of course. I am vice president of the Strategic-Udy Metallurgical & Chemical Processes, Ltd., which is a subsidiary of Strategic Materials. In other words, Strategic Materials has been working with me on these developments.

Where do you want me to begin?

Mr. BROADGATE. Would you be kind enough to give a brief technical outline of the principal processes that Mr. Udd mentioned and then their adaptation to the principal minerals such as manganese, chrome, and this steel process.

Mr. UDY. Let us take the manganese first.

I guess that is the one that is of most interest. I do not know whether it is of most interest or not but let us take it first.

We have worked principally on the Brunswick deposits. Those ores as they come from the mine run about 10 percent to 12 percent manganese. They can be put through a sink and float process to bring them up to about 15 percent. By finer crushing they can bring them up to about 18 percent.

Our work has been done on 13 percent manganese ore and 15 percent.

Now, we take this ore and crush it fine. As a matter of fact, we would like to have it as concentrates, the finer the better. We put any flux that we need in it. It is run through a kiln, a rotary kiln, and brought up the maximum temperature that that kiln will take without ringing the kiln.

We want capacity through the kiln and we do not want it to ring. We want it free flowing material so that it comes through the kiln as a free flowing material and each dust particle is an individual particle. We do not have any idea of dusting from there on.

There are two versions of the treatment from there on, depending on the power cost and the cost of fuel.

If the cost of power is high as it is at Brunswick approximately 7 mills, then we have substituted up to 40 percent of the B. t. u. required with oil. We could use cheap gas and other fuels.

Now, that material from the kiln is run hot and the Brunswick ore will stand about 1,020° C. without klinkering or without ringing the kiln and it is free flowing. That is run directly into a reverberating

Mr. BROADGATE. It is of interest. Do you have anything more to 1,350°.

Then that reverberatory is tapped into an electric furnace. The temperature is brought up to 1,400° and we add anthracite. We have

been using anthracite but we can use coal, coke, or other fuel, but at Brunswick the anthracite is about the cheapest fuel we could get up there per pound of carbon so that we have used anthracite.

That selectively reduces the iron and phosphorus. The phosphorus goes into the iron and the irons from this particular ore have run 3 to 3½ percent phosphorus.

The slag will run around 23 percent manganese and about zero-one to zero-two phosphorus. That slag is tapped from that furnace while molten and put into the second electric furnace where lime and more anthracite is added and the high carbon ferromanganese is produced.

Now, we run in this such a way that we will produce a slight trace of calcium carbide in the slag. In that way we upset the equillibrium between the normal operation of 15 percent in the slag and the manganese in the metal, and our slags will run less than 1 percent on the average so that all of the manganese is going into high carbon ferromanganese.

Now, that material has been on grade and has been excellent material from the New Brunswick ores.

Mr. BROADGATE. That will meet the market specifications and the market price?

Mr. UDY. Yes, the market specifications and the market price. If it is required to make medium carbon ferromanganese, then we take the hot slag, the 23 percent manganese low phosphorus slag, low iron slag into a furnace hot. We add coke only or coal and make silicomanganese. Then into the third furnace more hot slag and hot silicomanganese is put into that furnace and we make a low carbon, a medium carbon ferromanganes.

There is not much sale for low carbon ferromanganese. It is almost useless to make it but there is some sale for medium carbon ferromanganese about 1½ to 2 percent. That has been doen on the Brunswick ores.

Mr. REDWINE. Mr. Chairman, may I ask a question at this point?

Senator CHURCH. Certainly, Mr. Redwine.

Mr. REDWINE. In these various experiments at what size is the pilot plant that you have operated? Have you actually been in production producing these materials for industry?

Mr. UDY. No.

Mr. REDWINE. It is a pilot- plant operation?

Mr. UDY. It is a prototype operation.

Mr. REDWINE. What size, Doctor?

Mr. UDY. In Niagara Falls, N. Y., we have a 100-kilowatt furnace in which we work out the chemistry and metallurgy. If it looks good, then we will take it to our prototype plant in Niagara Falls, N. Y., which is equipped with pressure handling equipment, an 80-foot rotary kiln, 120-foot reverberatory furnace, and three 1,000-kilowatt electric furnaces. That is the second step. That is about a 10 to 1 boost.

In that plant we get the data that is required for engineering studies and engineering and designing the proper plant for commercial scale production.

Mr. REDWINE. Doctor, let me go a little further, if I may.

How accurately can you work out from your Niagara experimentation the economics of this process in a commercial plant?

Mr. UDY. Well, I think that we can work them out very closely and Koppers Co. has incorporated with us and they have done the engineering work and collected the data and Mr. Blackburn this afternoon gave that testimony.

Mr. REDWINE. Unfortunately, I was called from the room and I did not hear it.

Mr. Chairman, I think that it is very important that we develop, if possible, the approximate price at which this material can be sold, the estimated price through these processes as compared with other processes that you would be competing with.

Mr. UDY. Well, as Mr. Blackburn has indicated, the cost of production is about $150 a ton. In our estimate we have taken $180 a ton whereas the market price is $245 a ton.

Mr. REDWINE. Power is a large factor in that, is it not, sir?

Mr. UDY. We substitute as much power in the Brunswick case as we can. We substitute as much British thermal unit with oil as we possibly can. We have been up to close to 40 percent.

Mr. REDWINE. Substitution by oil?

Mr. UDY. That is right.

Mr. REDWINE. Then at what level of price for electric energy are you figuring?

Mr. UDY. Well, the oil in electrical energy will cost us about 2 mills whereas if we buy the electrical power it will cost us 7 mills.

Mr. REDWINE. But you can substitute oil the extent of only about 40 percent of the total requirements?

Mr. UDY. That is right.

Mr. REDWINE. That is all I have, Mr. Chairman.

Senator CHURCH. Do you have any questions?

Mr. BROADGATE. I have no questions except that I hope that Dr. Udy will cover the chrome situation.

Mr. UDY. I would like to cover this a little further.

I want to say that this process is not only applicable to low-grade ores but it is applicable to high-grade ores.

In estimates made on high-grade ores, if I would say what it cost it might be you would think I was crazy, so I am not saying what they are but I know they are very much lower than anyone else can produce.

Mr. BROADGATE. Can you give us an idea percentagewise?

Mr. UDY. I would not want to do it. I would rather the engineers would figure it out because all of my work has to be checked anyway by the engineers, from the engineering angle and from the design of the plant and all of that.

Carrying that a little further, in speaking about the southwestern ores this morning, if a plant can be located such that ores can be shipped in as well as the southwestern ores used, then you have a good combination for the United States in an emergency, because this plant can be thrown from high-grade ores to low-grade ores overnight.

Mr. BROADGATE. Doctor, I understood from Mr. Udd it would be impossible to pay the prices that the Government is now paying for the southwestern low-grade ores, and I presume that applies to the ores in Montana, that are produced in the neighborhood of the present stockpiles.

How could you expect to ship any in?

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Mr. UDY. Well, we can ship in ores from Cuba, we can ship in ores from South America at prices that are favorable to us at the New Orleans port, of course.

Mr. BROADGATE. Would you not be putting yourself out of business as far as the domestic ores are concerned? Would it not be better to locate, as an electrolytic manganese and a chrome plant did, down near a seaport and operate entirely on foreign ores?

Mr. UDY. It might be, but I am thinking in the case of an emergency.

Mr. BROADGATE. There would be no advantage to you?

Mr. UDY. No; no advantage to us at all.

Mr. BROADGATE. In placing a plant in the Southwest predicated on a possible emergency. People like to make money right now.

Mr. UDY. That is right.

Mr. BROADGATE. It would be nice to have you do it and the committee would like to see someone put in a plant in the Southwest and in Montana on the presumption that some time we might need it. What we want to do is put some men to work right now.

Mr. UDY. If you have and can deliver enough ores in the Southwest, that is all right.

Mr. BROADGATE. I understand from Mr. Udd that some survey has been made.

Mr. UDY. How much ore can you deliver from the Southwest I do not know. I just do not know how much manganese ore there is in the Southwest.

Mr. BROADGATE. Certainly whatever there is we know from practical experience that although there is some high-grade ores involved, some high-grade ores have been found in the United States, that the average ores are low grade.

Mr. UDY. Yes, sir.

Mr. BROADGATE. And they certainly could not compare with 46 and 50 percent imported ores.

Mr. UDY. On the carload.

Mr. BROADGATE. Unless the process is peculiarly adapted to that grade and not to the ores.

Mr. UDY. It is.

But the carload of Government ores that was shipped to us was shipped in bags and these bags were supposedly taken from each source. They analyzed all differences. So we had to blend the whole carload before we could get a constant mix that we could operate on. And the average of that car that was shipped to us we do not know that the stockpile will average the same or not, but it averaged around 30 percent.

Mr. BROADGATE. That was way too high. Evidently that was not a general sample of the stockpiles.

Senator CHURCH. That was high grade.

Mr. BROADGATE. And it was probably taken from a certain shipment.

Mr. UDY. From the different shipments.

Mr. BROADGATE. I happen to know what the average grade is at both those stockpiles and at the Butte stockpile and that is way too high. But that is not the exact point I am trying to get at.

What I am trying to find out is what advantage it would be to your company to establish a plant to operate on the domestic low-grade ores if you can operate more successfully on the cheaper foreign high-grade ores.

The committee certainly hopes that it will be to your advantage to use domestic ores.

But will it when it comes right down to the basic facts?

Mr. UDY. Certainly the company would not want to put in a plant in the Southwest if they cannot supply enough ore in the Southwest to give us a production that would be economical.

Mr. BROADGATE. I think enough ore can be supplied.

Mr. UDY. At what price?

Mr. BROADGATE. That is just the point.

Senator CHURCH. That is the question.

Mr. BROADGATE. At the present time a lot of them are not getting rich at $1.65 and $1.70 a unit.

Mr. UDY. We would not pay $1.70 a unit.

Mr. BROADGATE. Not when you can buy it in Baltimore for $1.40 or $1.30, I am sure.

On what do you predicate the idea of putting a plant in the Southwest?

Mr. UDY. We are not proposing to put it in the Southwest exactly. Is that not right?

Mr. UDD. That is right.

Mr. BROADGATE. The stockpile ores of 22 percent would not ship someplace else?

Senator CHURCH. I think we have 2 gentlemen here, 1 of whom is a specialist in the techniques.

Mr. UDY. Yes, sir, that is right.

Senator CHURCH. And the other of whom is a specialist in the business phases.

Mr. BROADGATE. That is true.

Senator CHURCH. Some of these questions perhaps could better be directed at Mr. Udd.

Mr. UDD. Thank you, Mr. Chairman.

May I respond to this statement briefly?

Dr. Udy is a metallurgist active in Niagara Falls and consequently not acquainted with the ore possibilities and economic prospects in certain locations other than material referred to and consideration than I happen to be and others in the organization. With all due respect to him, he knows a great deal more than I do. But it just so happens that that has been my field of operations.

Our concept of the Southwest and our interest in the Southwest is predicated upon our belief that we are going to be able to attain in that area ores within the economic range for continuous production by this method and this process. I do not suggest that we will have to pay $1.65 or $1.70 a unit to maintain manganese production in the Southwest. I do not want to get into the detail of that because that would involve bringing out all maps and data relating to properties in that area. Treasure Mountain is a good example, the property in Arkansas is another, and Artillery Peak, Ariz., is another example, and there are several possibilities and prospects that have never been checked out sufficiently to determine the basis. But there is no doubt

in my mind that there is ample ore to sustain a plant on a continuous basis economically.

Mr. BROADGATE. And that you can make a product from those ores and the same situation pertains to Montana? Can you make a product from those ores that will compete with someone else working at tidewater with high-grade foreign ores being shipped in?

Mr. UDD. Again we have a matter of relativity. If foreign ores continue at current cost and it does not appear to be any likelihood of too much drop or very material drop, I answer that question "yes" we can compete.

On the other hand, if foreign ores drop to 50 percent of their present price, then any domestic operation operating on domestic ores will suffer.

Mr. BROADGATE. You give us a lot of encouragement.

Mr. UDD. I would like to go further than that if I may. I do not wish to monopolize this phase of this discussion.

Our thought, our concept after we looked into it has been the establishment of a plant in the Southwest for that very continuous production of ferromanganese. That plant would be more economic after it has paid out and the capital is returned. Its competitive factor would be materially greater. The big problem is the initial concept, the initial development, getting under way with the one program. That is the hurdle we would like to achieve, because we are sure once we are in range it will work out.

Referring to Montana, I specifically recited that the plant was adaptable to handling chromite or manganese. I can see the possibility from that of a single plant converting the present stockpile into ferrous manganese and when that material runs out if there is not sufficient manganese ore available to sustain operation, there certainly is sufficient chromite ore, so that the plant could be continuous in Montana as well.

Senator CHURCH. Mr. Redwine?

Mr. REDWINE. There are 2 or 3 phases to be cleared up, in my opinion.

First, Mr. Chairman, this committee has heard testimony ad infinitum.

Mr. Adkerson, for instance, representing the Manganese Producing Association, testified yesterday that the domestic producers have told this committee time and time again that they have to have around $1.70 a unit for their product in order to stay in business.

Is that correct, Mr. Adkerson?

Mr. ADKERSON. Yes.

Mr. REDWINE. So it seems to me on any process that is developed that you have to consider if you are going to have a going producing manganese industry in this country, it has to be predicated on the price of around $1.70, Mr. Chairman. That has been the testimony before this committee time and time again.

Now I would like to direct this question to these gentlemen.

What is the magic of the New Brunswick ores? What about the Cuyuna Range in Minnesota? What about the Aroostook ores in Maine? They are supposed to be our largest reserves in this country. Have you tested them?

Mr. UDD. Not furnacewise. We are quite familiar with the Aroostook deposits and their grade.

Mr. REDWINE. Then my next question would be this, Mr. Chairman. Apparently you have mingled ores from the various stockpiles to get a sufficient quantity on which to run your tests. You have had no experience in these ores as they may be in Winden or Deming or Butte-Philipsburg. Is that correct?

Mr. UDD. We have run, on a small scale, the stockpile concentrates in the Southwest, El Paso——

Mr. REDWINE. Mingled?

Mr. UDD. Mingled.

Mr. REDWINE. From the three stations in the Southwest but not individually?

Mr. UDD. We are not aware or sure whether they were mingled from all 3 piles, or from 2 piles, or 1 pile. We received a carload without any information where they came from other than the Southwest.

Mr. REDWINE. The earlier witness said they came in bags. You do not know where they came from?

Mr. UDY. Except the bags came from and they were marked on different bags, from different mines and producers.

Mr. BROADGATE. That is the difference in grades, Mr. Redwine. The ores were dumped from the various mines into separate piles. They probably do not show an average.

Mr. REDWINE. What is in the individual stockpile?

Mr. BROADGATE. That has been averaged by GSA from the sum total of their assays and tests. Very likely they got a hold of some high-grade rocks from some mines better than the average.

Mr. UDY. Some were low, yes; but others were higher.

Mr. REDWINE. Mr. Broadgate, is this not true, that on the average the grade at El Paso is higher than the other two Southwestern deposits? Is that not true?

Mr. BROADGATE. I understand that is true.

Mr. REDWINE. You do not know how much of it came from El Paso?

Mr. UDY. Some came from Deming and some from El Paso.

Mr. BROADGATE. That is Mexican ore, or course.

Senator CHURCH. Well, the $1.70 figure that you used, Mr. Redwine, is meant the figure that represents under present cost conditions what needs to be paid in order to make the mining of this low-grade ore profitable.

Mr. REDWINE. "Possibly." If we may substitute the word "possibly" rather than "profitable."

Mr. BROADGATE. Mr. Chairman, the thing that appealed to me was that Dr. Udy, and I think Mr. Udd, but particularly Dr. Udy remarked that the beneficiation cost of the end product was considerably lower than the present standard methods of production. I hoped because of that they might be able to pay more for the ore than anyone else could pay to run it. They could make up that difference.

Mr. UDY. The only thing that will allow us to determine that would be to run enough of the ore through our prototype plant and get the data. Then we might tell you what we could pay for it.

Mr. BROADGATE. It is possible to get GSA to give you further samples, I am sure. I have had it done in the past.

Mr. UDY. It would not be samples. It would be enough to run a month or 2 months.

Mr. BROADGATE. Several carloads. I have had as much as 80 tons released by them.

Mr. REDWINE. Is it your concept that you can profitably manufacture the end product you have in mind paying $1.70 a unit for manganese?

Mr. UDY. No. I do not think so, not $1.70.

Mr. REDWINE. Mr. Udd, you are the economist. What is your answer on that?

Mr. UDD. For conversion into carbon ferromanganese, I was just doing some calculating, it would require an ore cost alone of $145 per ton of carbon manganese and concentrate delivered sale price today is $235, and likely less.

As you know, ferromanganese is selling today from import sources in some cases as low as $170 a ton. A spread between $145 and $170 does not leave room for production costs.

Mr. REDWINE. I have one more question, Mr. Chairman, and then I will be through.

Do you feel that there is any possibility of you persuading the ODM to turn over stockpile material, manganese material for less than it cost them?

Mr. UDD. I have never discussed it with them. I have no idea.

Mr. UDY. Let me answer one question, the one where you asked where is the magic in the Brunswick ore. The magic in the Brunswick ore is that there is a quantity of it and the company owns it.

Mr. REDWINE. That is a very good answer.

I have nothing more, Mr. Chairman.

Mr. UDY. If somebody owns that ore out there and they mine and smelt it, it is a different thing than mining it and selling it to the smelter.

Mr. BROADGATE. That is true. I did not mean to harass either of you gentlemen, but the committee is so very much concerned with utilization of low-grade domestic ores that we probably have gone into the matter further with you than any other witnesses because of the apparent success of your experimental work and in the hopes that the economics of it were such that we could see in the future the utilization of these ores as against foreign ores cost and consequently a continuation of our low-grade chrome and manganese mining; but it apears from the testimony that it would be very difficult to make a product in competition with that made from the high-grade, low-priced foreign ores that would compete in the market.

Senator CHURCH. Unless, of course, we had changes in the existing law that might impose excise duties on the imported ores.

Mr. BROADGATE. That is true.

Senator CHURCH. That would change the relative price picture.

Mr. BROADGATE. It seems very unlikely that a sufficient duty could be applied to manganese to raise the domestic price directly to $1.70. It probably would have to be a subsidized plan, a subsidization plan.

Mr. UDD. Mr. Chairman, there is a possibility in this situation that should be brought out. It is conceivable that ores, or concentrates, I should say, costing $1.70 a unit, could be acquired at that price for

conversion into medium carbon ferrous manganese without any losses sustained by the Government or anyone concerned, because the spread between medium carbon and standard allows sufficient return to justify that payment based on results we know today.

Mr. BROADGATE. You are speaking now about the ore already mined?

Mr. UDD. That is right.

The problem, however, is that the market for medium carbon as related to standard carbon is very limited, the question being rather that the Government would wish to stockpile medium carbon ferrous manganese rather than standard carbon.

My recollection is that about 80,000 to 90,000 tons of medium carbon ferrous manganese is used in the steel industry per year now as related to about a million tons, roughly, of standard carbon.

I think the stockpiles could be converted into medium carbon ferromanganese.

Mr. BROADGATE. To the account of the Government?

Mr. UDD. To the account of the Government, without any loss to the producer nor to the Government.

Mr. BROADGATE. That does not solve the problem of continuing the industry beyond that point; does it?

Senator CHURCH. We have a very real problem entailed, as far as the stockpile is concerned.

Mr. UDD. You have a continuing problem, too, in the sense this might be the procedure, to put up a plant large enough to convert the stockpile over a gradual period to medium carbon while similarly taking concentrates in limited quality in continuous production of medium carbon.

Mr. BROADGATE. I agree with that.

Mr. UDD. I believe that has potential economics and that is a matter we would be glad and willing to check. We have not had an opportunity, of course, to apply that in our large plant. If we had assistance from the Government in that respect we would be glad to work it out.

Mr. BROADGATE. You have not made a new proposal to ODM, nothing since the one 2 years ago?

Mr. UDD. We made one in May a year ago, a written suggestion just along the lines that I now mentioned.

Senator CHURCH. It may be.

If we had an opportunity to review this testimony, it may be advisable to suggest and the committee make recommendation to the appropriate Government agencies in regard to this possibility.

Mr. BROADGATE. I might say, Mr. Chairman, that I want to put this matter on the record. The chairman of the full committee has already written to ODM asking the status of these various proposals including this one.

Senator CHURCH. Including this one? That is fine.

Do you have any further questions?

Mr. BROADGATE. No.

Senator CHURCH. Mr. Redwine?

Mr. REDWINE. No.

Senator CHURCH. Thank you very much, gentlemen, for coming. Your testimony has been helpful to us.

Mr. UDY. Thank you.

Mr. UDD. Thank you.

Senator CHURCH. The hearing will be recessed now. It will take up again tomorrow morning at 10 o'clock, at which time Governor Russell of Nevada will appear to testify as representative of the western governors conference.

The hearing is in recess until 10 o'clock tomorrow morning.

(Whereupon, at 3:30 p. m., the hearing was recessed until 10 a. m., Friday, March 28, 1958.)

LONG-RANGE PROGRAM FOR MINERALS INDUSTRY

FRIDAY, MARCH 28, 1958

UNITED STATES SENATE,
SUBCOMMITTEE ON MINERALS, MATERIALS, AND FUELS,
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in room 224, Senate Office Building, Hon. Alan Bible (chairman) presiding.

Present: Senators Alan Bible, George W. Malone (Nevada), Henry Dworshak (Idaho), and Frank A. Barrett (Wyoming).

Also present: Senators Richard L. Neuberger (Oregon), and Frank Church (Idaho).

Staff members present: Robert F. Redwine, assistant counsel to the committee, and George B. Holderer, staff engineer.

Senator BIBLE. The subcommittee will come to order.

This is a continuance of the mining hearing.

We are very delighted to have with us this morning a distinguished fellow member of our committee, a man who has demonstrated a great deal of interest in the mining problems.

Senator Neuberger, we are happy to welcome you to this subcommittee.

STATEMENT OF HON. RICHARD L. NEUBERGER, A UNITED STATES SENATOR FROM THE STATE OF OREGON

Senator NEUBERGER. Thank you very much, Mr. Chairman.

I, first, want to say that I am extremely grateful to you for permitting me to go on first this morning, ahead of your own distinguished Governor. I realize that that is not protocol, but we here in the Senate have such a tight schedule, and I am supposed to be at another meeting at this time to discuss Pacific-coast orchard problems.

I sometimes think, Mr. Chairman, that people are like the character in Midsummer Night's Dream, that nobody is ever so busy but what he can tell you how busy he is, but I do want to thank you for giving me an opportunity for a brief moment at this time to make an introduction and leave with you my own statement for your record.

I understand your leading witness this morning will be the Honorable Charles Russell, Governor of your own State of Nevada, who is here to speak for the western conference of governors. I want to pay my respects to the Governor, who comes from a State which, traditionally, has been associated with the growth and development of the mining industry. No speaker could be heard more appropriately at a minerals hearing than Governor Charles Russell.

Mr. Chairman, I recently had the privilege of writing an introduction to a reissue of an old book about the great Comstock lode, and I visited in your State many times, and I think I have an appreciation of the necessity of the mining industry and development of minerals to all our Western States, in general, but to your own State of Nevada, in particular.

Mr. Chairman, testifying from Oregon later this morning, after Governor Russell appears, will be Mr. Hollis Dole, director of the Department of Geology and Mineral Industries of the State of Oregon. I know that what Mr. Dole will tell the committee will be factual, forthright, and significant. He is a career official who has served our Oregon State Department of Geology and Mineral Industries under both Republican and Democratic governors. He has been with the department he directs for many years, and no man in the State of Oregon is more conversant with the State's mineral situation than Mr. Hollis Dole. In addition, Mr. Dole, I think, will emphasize to you the fact that our own State of Oregon, with its great mineral potential and its power potential to process and develop those minerals, has shared relatively little in the stockpiling program of the National Government.

Mr. Chairman, rather than impose further on your time and on that of your colleagues and my colleagues, I would like to submit my statement for inclusion at this point in the record. I would ask your indulgence that it appear in full in the record, if that is agreeable.

Senator BIBLE. Without objection, that will be the order.

(The statement referred to follows:)

PREPARED STATEMENT OF SENATOR RICHARD L. NEUBERGER

Mr. Chairman, last year, when I presented a statement before the Subcommittee on Minerals, Materials, and Fuels of the Senate Committee on Interior and Insular Affairs, I stressed the fact that we seem to be arriving at a point where we could very easily immobilize our own domestic mineral industry. I stressed, additionally, that to allow this to happen would be very poor business because any emergency or unanticipated situation shutting off our imports would be doubly serious if our own domestic industry were unable to expand its production quickly. Let me quote directly from my last year's statement:

"We should certainly consider, too, the great cost that must be anticipated if a sudden emergency made necessary the immediate revival of any industry allowed to become wholly inoperative. Skilled workers and modern techniques cannot perform their essential tasks unless some semblance of a domestic industry is maintained. The problem of recruitment and retooling is one that we learned much about not many years ago. We should not be indifferent to the lessons we learned at that time. To make sure that our own mines could be brought into full production with minimum delay makes imperative a program that keeps alive the nucleus of our own domestic mining industry. The program that has operated under the authority of the Office of Defense Mobilization had that as one objective."

I then turned to the question of our national responsibility by stating as follows:

"Whether we continue to breathe life into our own domestic mining industry by tariffs or by subsidies, it is evident that assistance through Government action of one sort or another is inescapable.

"I have one question that always arises when these are the alternatives faced. Isn't it more equitable, since our action is taken in our own self-interest, to spread the burden evenly by payment of a subsidy than to resort to a system of increased tariffs which may jeopardize the program of expanded world trade to which both our parties are fully pledged?

"It just seems to me, Mr. Chairman, that we must answer that question satisfactorily before we pass any legislation designed to operate as a long-range

mineral program. My own State has a small but, nevertheless, significant role to play in supplying certain minerals which would become strategic were the Nation suddenly denied access to foreign markets. Today, Oregon's mining industry faces a most uncertain future. To play its part in the event of a national emergency would be difficult if not impossible unless it is bolstered by a friendly and helpful domestic program."

The uncertainty that faced the mining industry of Oregon last year has now given way to near despair on the part of many Oregonians engaged in mining. This is particularly true in the chrome industry, which is rapidly closing down. The present domestic stockpiling program in metallurgical-grade chrome will grind to a halt in the next 4 or 5 weeks when the quota of 200,000 tons will have been delivered to the Grants Pass chrome depot operated by the General Services Administration.

I am not going to take the time to repeat information that will be presented in the testimony of Mr. Dole. I would like to suggest that Oregon, with one of the highest unemployment rates of any State in the Nation, can ill afford adding further to its unemployed. Yet that is the dark prospect if present mineral policies prevail. Only a long-range minerals program will give the industry the stability that sssures steady employment. A chrome industry in Oregon that in 1956 passed the $2 million mark but slipped to $670,200 in 1957 reflects the lack of confidence in the administration's approach to a long-range mineral policy.

It seems to me, Mr. Chairman, that a paragraph in the January 28, 1958, report of the Special Stockpile Advisory Committee voiced the need for such a policy as it would apply particularly to chrome in these words:

"The committee recommends that a mechanism be established to appraise the possible effects of research and development activities on requirements for high-temperature and other special-property materials. Instead of relying on past use patterns, possible needs 5 to 10 years hence must be surveyed and stockpiles built up as need is indicated."

From the expert testimony gathered at this hearing, let us hope we may find the way to establish, finally, a program that is, in fact, long range. Certainly, the Western States, with their resources of mineral wealth, urgently recommend the development of such a program. But the welfare of the Nation also dictates decisive action in the initiation of a truly long-range mineral program.

Senator NEUBERGER. I also offer for the record an editorial from the January 16, 1958, Illinois Valley News, of Oregon, a March 5 news release from the Oregon Department of Geology and Mineral Industries, and wires that I have received from constituents vitally interested in this hearing.

And I want to thank you for the courtesy and hospitality which I know you will show later on this morning to Mr. Hollis Dole from our State of Oregon.

Senator BIBLE. Thank you very much, Senator Neuberger, and I might add that Hollis Dole is well and favorably known to members of this committee, and has appeared before us on numerous other occasions. He has always been very helpful. We are delighted to have such a fine representative from the State of Oregon.

Senator NEUBERGER. I appreciate that comment, Mr. Chairman.

Senator BIBLE. Thank you very much, Senator Neuberger. The material you referred to will be inserted in the record at this point.

(The material referred to follows:)

[From the Illinois Valley News, January 16, 1958]

WE NEED TO EXTEND CHROME BUYING

Congress is back in session and the President has submitted his budget. Major emphasis is being placed on national security and a reorganization of our educational system.

While these things are of prime importance, we hope the administration and the Congress will not overlook measures badly needed to bolster the domestic

economy. We cannot place large orders for defense purposes with a few of the big corporations of the country and neglect the rest of the business world.

There are two things which are badly needed to keep our local industries producing and to keep money flowing into this part of southern Oregon. They are a major upturn in the home building industry and a mineral policy which will expand our mineral resources development—not only in nickel, but also in chrome.

The chrome purchase depot at Grants Pass is scheduled to close when a total of 200,000 tons has been purchased, or by July 1, 1959. This is the limit of the present authorization and appropriation. This figure is expected to be reached sometime this summer. The report last October showed already bought 158,667 tons, and only 42,333 tons yet to go.

Many of our local miners are wholly dependent on this market. This is the reason:

The large consumers of chrome, the toolmakers and the automobile manufacturers, are importing all their chrome at much lower prices than is paid for the Government stockpile. If this sales outlet is eliminated, the chrome business will practically close in California and Oregon.

At the time of the First World War the United States depended almost entirely on chrome imports. Some of the ships carrying it here were sunk by the enemy U–boats. When the Second World War came we were again low on domestic production. Luckily we did not lose as much in the ocean shipments.

After the war the Government set a price of $115 per ton for a certain grade of chrome ore, and the purchase depot at Grants Pass was set up. The objective was to stimulate the development of known reserves of chrome in this section, and to bring more into production. The price paid, higher than the world market, did accomplish the purpose to a limited degree. Only recently a large chrome area was located near Happy Camp, Calif., and some of that product is now coming into Grants Pass.

Locally a number of chrome claims were worked and the market outlet has been a great convenience to these operators. They are now faced with not only the loss of this outlet but practically with being forced to discontinue operations, while our own users of chrome continue to buy from abroad.

The Chrome Belt in the United States runs along the coast range from deep in California to the northern part of Oregon. There is also some produced in Alaska.

Are we ever going to learn? Are we always reverting to national mineral policies which freeze out and discourage domestic production?

Locally it will mean the loss of an important source of income, if the Government fails to act to continue measures to stimulate the production of chrome.

Under the leadership of the Illinois Valley Chamber of Commerce the civic groups of the chrome producing belt are now being organized to work with the National Minerals Policy Committee with headquarters in Washington, D. C., in an effort to get this purchase program extended and enlarged.

[From Press Release No. 134, State of Oregon, Department of Geology and Mineral Industries, March 5, 1958]

FERROCHROME-PLANT STUDY TO BE MADE

A study on the feasibility of a western plant to make ferrochrome from domestic ores was authorized March 4 in a cooperative arrangement between two organizations within the executive department of the State of Oregon. The two organizations cooperating on the study are the department of geology and mineral industries and the department of planning and development. Purpose of the study is to determine if local processing of domestic ores could sustain mining of chrome in Oregon.

Metallurgical-grade chromite in the United States is found only in Oregon, California, Washington, and Alaska. Domestic mining has been restricted to periods of international stress when chrome shipments from overseas were cut off and incentive prices paid by the Government. At the present time Oregon's chrome mining is for the Government stockpile of strategic materials. The chrome program was established during the Korean crisis. The amount of domestic chrome allocated for stockpile purchase is expected to be obtained within the next few months and as a result chrome mining will cease unless a market can be established.

Both the department of geology and mineral industries and the department of planning and development recognize that loss of this basic industry would be detrimental to the State's economy and hope that some plan can be worked out that will prevent the loss. The ferrochrome-plant-feasibility study is only one of several plans under consideration by the State departments and west-coast chrome miners.

The United States Department of the Interior proposed a plan for subsidization of domestic chrome mining when the national long-range minerals program was presented to Congress last summer. The Secretary of the Interior in presenting the plan, which is considered unrealistic and not workable by the chrome miners, stated, "The basically short world supply coupled with the strategic nature of [chrome] as well as the heavy dependence of the United States on distant overseas sources of supply, underscore the desirability of making every effort to develop and maintain some production from domestic sources." It has been announced that the Department of the Interior is preparing another long-range minerals program for presentation to the Senate Committee on Interior and Insular Affairs.

If it appears that a ferrochrome plant would benefit Oregon chrome mining, the plan will be presented to the Senate committee.

Ivan Bloch & Associates, industrial and economic consultants, Portland, Oreg., have been retained to make the study.

CANYON CITY, OREG., *March 24, 1958.*

Senator RICHARD NEUBERGER,
Senate Office Building, Washington, D. C.:

Any assistance you can give Mr. Hollis Dole, our department of mining director, who is in Washington, will be greatly appreciate by the Grant County Mining Association.

Sincerely yours,

WM. W. GARDNER,
President, Grant County Mining Association.

CANYON CITY, OREG., *March 26, 1958.*

Senator RICHARD L. NEUBERGER,
Senate Office Building, Washington, D. C.:

Extension of chrome and manganese program would help relieve unemployment needed. As to details would recommend suggestions of Oregon State Department of Geology who have made a study of the situation. Chairman of this board, Hollis M. Dole, is now in Washington to confer with you. I shipped both wars.

I. B. HAZELTINE.

JOHN DAY, OREG., *March 26, 1958.*

Senator RICHARD L. NEUBERGER,
Senate Office Building, Washington, D. C.:

Chrome producers this area urge support of pending legislation for maintaining price support. Will abide by your best judgment.

FRANCIS COLE,
Assistant Cashier, Grant County Bank.

Senator BIBLE. Governor Russell, I will welcome you and the distinguished Louis Gordon, the secretary of the Nevada Mining Association, at the head table, if you would like to be seated over here next to Senator Malone.

Senator MALONE. Mr. Chairman, I might suggest that we have Bill Wagner, secretary of the Chamber of Commerce of White Pine County, Nev., and Bob Stopper, who conducts a mining business, here. I wonder if they could sit here.

Senator BIBLE. I have no objection at all; possibly sit right next here to Mr. Gordon.

Governor, we welcome you, and, prior to your testimony, I would like to read into the record a telegram which we have received from Gov. Bob Smylie, of Idaho, the chairman of the western governors' conference, which, in part, says:

> Gov. Charles Russell of Nevada will appear on behalf of the western governors' conference at 10 a. m., March 28. Governor Russell is fully authorized to present views of the conference.

Governor, I personally welcome you for the statement you are going to bring us and the resolutions which you are going to present. Would you prefer to present your testimony in full before questions are asked? We will accommodate you whichever way you like.

STATEMENT OF HON. CHARLES H. RUSSELL, GOVERNOR OF THE STATE OF NEVADA, ACCOMPANIED BY LOUIS GORDON, SECRETARY, NEVADA MINING ASSOCIATION; ROBERT STOPPER, MINERVA SCHEELITE MINING CO., WHITE PINE COUNTY, NEV.; AND WILLIAM WAGNER, SECRETARY, WHITE PINE COUNTY CHAMBER OF COMMERCE, NEVADA

Governor RUSSELL. I would appreciate it if I could present the testimony and then, of course, any questions that you or the other members of the committee may care to ask, we will be pleased to answer them.

Senator MALONE. Mr. Chairman, I would like the record to show that Mr. Louis Gordon, the Secretary of the Nevada Mining Association, is with the Governor and to supplement and help him with his testimony, and that Mr. Bob Stopper, who is in the mining business in eastern Nevada, is here, and Mr. Bill Wagner, Secretary of the White Pine County Chamber of Commerce.

Senator BIBLE. The record may so show the presence of the other distinguished members of the Nevada delegation.

Governor RUSSELL. May I state at the opening that Mr. Gordon appears with me. He is secretary of the mining advisory council of the 11 western governors. He is also secretary of the Nevada Mining Association. He is secretary of the Committee for National Minerals Policy. He is secretary of my own advisory mining council in Nevada, and a member of my Nevada Advisory Highway Committee, representing mining on that committee.

Mr. Robert Stopper, who is here, is a mining engineer and one of the tungsten producers in eastern Nevada.

As you gentlemen know, of course, in the West and particularly in a number of Western States, mining is one of the most important factors we have as far as development and growth is concerned. The production of the raw materials in the West we sincerely feel is not only important to the growth and development of the Western States but also to the Nation as a whole because we feel that in a time of emergency or time of war the closest and main source of material will be in the United States and in the Western States, and a comprehensive, long-range program that will help the mining industry, in turn, will keep it in order to be ready in case any emergency should arise.

In representing the 11 western governors in appearing before this committee I have a statement from Governor Clyde of Utah, and also

a statement from Governor Knight of California which I would like to read into the record.

George D. Clyde, Governor of Utah, in a telegram to me, made this statement:

SALT LAKE CITY, UTAH, *March 19, 1958.*

Hon. CHARLES H. RUSSELL,
Governor, State of Nevada,
State Capitol, Carson City, Nev.:

Circumstances make it impossible for me to appear in person at hearings on long-range minerals policy to be held by Senate Interior and Insular Affairs Committee. I would therefore appreciate your presenting the following statement to the committee on my behalf. I shall forward more extensive written statement to Chairman Murray for inclusion in the record.

I stand solidly behind the resolutions adopted by the governors of the Western States and Territories at our 1957 conference in Reno, Nev., and 1958 conference in Colorado Springs, Colo., calling for an effective long-range minerals policy to stabilize western mining industry and provide adequate national security.

Without some sort of import controls, domestic mines are at mercy of foreign competition in areas of cheap labor, far below American standard of living. Result is adverse to United States interests in two ways. Domestic economy suffers heavily, especially in western mining States. In addition, many mines are forced to close down and cannot be reopened in case of national emergency. Experience in two world wars has shown folly of depending on foreign sources for strategic materials in case of world crisis. Strongly urge effective action to preserve healthy domestic mining industry.

GEORGE D. CLYDE, *Governor of Utah.*

Senator BIBLE. That statement may be amplified by the Governor at a later date.

(The following statement was subsequently received:)

STATEMENT BY GOV. GEORGE D. CLYDE, OF UTAH, ON LONG-RANGE MINERALS POLICY

To Hon. James D. Murray, Chairman, Senate Committee on Interior and Insular Affairs, and Members of the Committee.

GENTLEMEN: I welcome this opportunity to present my view on long-range minerals policy for the consideration of your honorable body, and I regret that circumstances prevented my appearing before you in person.

Let me say at the outset that I shall not try to present the more technical aspects of western mining problems. I shall leave that to the qualified experts, including the manager of the mining association of my own State of Utah. I do wish, however, to discuss briefly some of the broader aspects of the problem and their effect on my own State, on the western mining region and on the Nation as a whole.

The basic position of the governors of the Western States and Territories, including myself, was set forth in resolutions adopted at the 1957 conference of western governors in Reno, Nev., and the 1958 conference of western governors in Colorado Springs, Colo. For the sake of clarity and completeness, I should like to include the text of these two resolutions in my own presentation at this point.

"RESOLUTION ADOPTED BY WESTERN GOVERNORS' CONFERENCE HELD IN RENO, NEV., APRIL 26 AND 27, 1957

"Whereas the western governors' conference fully recognizes and appreciates the efforts that have been made by the Federal Government to help the minerals industry to adjust to postwar conditions in a greatly changed international climate; and

"Whereas the conference further recognizes the fact that many of these efforts have, of necessity, been temporary in nature and of terminal value; and

"Whereas the time has now come that it is imperative that these temporary programs be replaced by sound, long-range programs that will provide a climate conducive to attaining a permanent stability in the minerals industry; and

"Whereas this permanent stability can only be achieved if the industry can, with confidence, formulate and carry out long-range plans, including exploration and development and the improvement of techniques of mining, recovery, and ultimate use of metals; and

"Whereas a stabilized minerals industry is necessary both to a sound peacetime economy in this country and to guarantee the national security in case of war: Now, therefore, be it

"*Resolved*, That the western governors agree that the necessary program can best be expressed in some form of protection for the domestic minerals industry against the differentials in the economy structures of various world producers of minerals; notably the differential between wage scale in this country, which we wish to maintain, and that of many foreign areas; and that effective steps should be taken to prevent this country becoming a dumping ground for cheap foreign production, and to permit the domestic minerals industry to operate on a basis of normal supply and demand, with only the amount of protection needed to adjust the differentials previously referred to."

"RESOLUTION ADOPTED BY THE WESTERN GOVERNORS' CONFERENCE, COLORADO SPRINGS, COLO., FEBRUARY 26, 1958

"METAL AND MINERAL MINING

"Whereas in the last 20 years the United States has changed from almost complete self sufficiency in nonferrous metals to almost 50 percent dependence on foreign supplies; and

"Whereas in the same 20 years tariffs have been reduced both by actually reduction of rates and by internal inflation of the currency by from 60 to 80 percent so that they are now almost universally below 10 percent ad valorem; and

"Whereas during that period mining costs have risen to 3 to 4½ times the 1958 level while prices have risen only to 2 to 2½ times 1938 prices; and

"Whereas the world mining industry has supplied all the metals and minerals for two wars and the United States Government stockpiles; and

"Whereas those stockpiles are now filled and the productive capacity which supplied metals and minerals for those stockpiles is no longer needed; and

"Whereas while much of this capacity was built in foreign countries, with United States Government encouragement, most of the portion which will have to close becaues of high costs lies within the United States; and

"Whereas foreign metals and minerals now enjoy about one-half of the United States market and unless adequate steps are taken they will take over much of the remaining one-half now supplied by domestic producers; and

"Where it is self evident that domestic mining cannot long survive unless it is assured its fair share of the domestic market on a reasonably long-term basis; and

"Whereas the internal economic health of most of the Western States is heavily dependent on the dollars brought into those States by the export of metals and minerals and those few Western States not so directly dependent on the mineral industry and directly affected by the economic health of the adjoining States who are more dependent on the industries; and

"Whereas much of the tax income on which the Western State governments operates is derived directly or indirectly from the mineral industry; and

"Whereas it is day by day becoming more apparent that in the event of another national emergency, no appreciable amounts of any metal or mineral will be available from overseas sources and if the Eastern States are to have metals for the manufacture of munitions and essential civilian requirements they must come from the West and from Canada and Mexico; and

"Whereas should such an emergency result in the use of atomic weapons, the amounts of metals and minerals required for minimum reconstruction would be far beyond any currently available supply: Now, therefore, be it

"*Resolved*, That the maintenance of a healthy metal and mineral mining industry in the Western States is of the utmost economic importance to those States both for themselves and as major markets for Eastern manufacturers, as well as being of the utmost importance to the national security and such a healthy industry may best be maintained by:

"1. Joint action by the administration and the Interior and Insular Affairs Committees of both Houses of the Congress in adopting and implementing a national minerals policy without delay; and by

"2. The Ways and Means Committee of the House of Representatives and the Senate Finance Committee taking all steps which may be needed to assure to the domestic mining industry at least one-half of the domestic market or the present proportion of the domestic market (whichever is higher) either by adequate tariffs, excise taxes, or quotas or allocation of import receipts or such combination as may be most suitable whenever an individual metal or mining industry has shown it can reach such levels.

"More specifically it is recommended—

"As to lead, zinc, tungsten and mercury, the Tariff Commission take early and favorable action.

"As to copper, lead and zinc, the Congress approve pending industry legislation, and that the United States Tariff Commission approve applications for tariff relief now pending before that Commission.

"As to cobalt, tungsten, mercury, fluorspar, colombium (and possibly manganese) the House Ways and Means Committee approve legislation providing sufficient import control to maintain present domestic levels of production.

"As to antimony, chrome, asbestos (and possibly manganese), the House Ways and Means Committee to approve legislation allocating import receipts to maintain a minimum nucleus of production in these metals.

"As to thorium, the Atomic Energy Commission either to provide a purchase program or release it from Government control and cease the purchase of foreign monozite at the expense of closing domestic mines.

"As to uranium, the Atomic Energy Commission refrain from purchasing high cost foreign production while limiting production domestically. We urge and request that immediate action be taken to provide adequate purchasing depots and milling facilities located sufficiently close to ore reserves and stockpiles in order that excessive transportation now paid by the Government and the producers may be obviated.

"As to gold and silver, grant to United States citizens the same right to own gold as granted to foreign governments and an increase in the depletion rate from 15 to 23 percent."

As I see it, there are two main issues on which the question of long-range minerals policy must be decided. These are: (1) the economic impact on local, regional, and national bases; and (2) the considerations of national security. Let us examine these questions in the order listed.

In considering the purely economic aspects of the problem, it is inevitable that we come face to face with two conflicting theories, those of protection and of free trade, both of which have many advocates among the professional economists. I have neither the theoretical background nor the desire to attempt a detailed analysis of these two theories, but I strongly feel that certain practical aspects of the problem they present must be given full consideration in the formulation of an effective long-range minerals policy.

I fully realize that the protectionist theory can be carried too far, so as to be harmful to everyone concerned—including the industry being protected. We have all seen past examples of industries receiving tariff protection to the point that they did not have to compete with foreign rivals. The result has been, and must always be, to remove the stimulus to efficiency and quality production. This is harmful to the American public and to the industry itself. Our whole economic and industrial system is founded on the principle of competitive free enterprise, and most or all of the inventive and production wonders that have made American industry the marvel of the world have come about under the spur of wholesome competition.

Let me point out, however, that the western mining industry is not asking for a degree of protection that will remove it from competition with foreign sources of supply. Rather, the industry is asking only enough protection to place it in a competitive position with foreign producers. The Reno resolution of the western governors' conference, which I have included above, specifically asks only protection "against the differentials in the economic structures of various world producers of minerals; notably the differential between the wage scale in this country, which we wish to maintain, and that of many foreign areas"; and further urges action "to permit the domestic minerals industry to operate on a

basis of normal supply and demand, with only the amount of protection needed to adjust the differentials previously referred to."

It should be realized that there is a fundamental difference between an American industry that produces a raw material and one that turns out a finished manufactured product, in their relation to foreign competition. Mass production methods and highly complex machines offer a manufacturer many advantages to offset lower labor costs in foreign areas. On the other hand, the major cost in the extraction of a raw material is labor, and it is impossible to apply standard American wage scales to this type of operation and compete directly with foreign producers whose labor costs are measured in pennies a day rather than in dollars an hour.

We cannot—nor do we want to—drop the wage level in the domestic minerals industry below the standard of the rest of the domestic economy. It then becomes obvious that we are faced with two alternatives. We can (*a*) provide the domestic minerals industry with a measure of protection sufficient to allow it to compete, on a basis of normal supply and demand, with foreign producers, or (*b*) abandon the domestic market to foreign producers, and close down most or all of our domestic mining industry.

I do not know if any ardent free trade theorists are actually advocating this second alternative. I do know that it would be ruinous to the economy of my own State, to the economies of the bloc of Western mining States, and, in the long run, to the economy of the Nation as a whole.

Many Western States, including my own State of Utah, have built their economies to a considerable extent on the minerals industry. As a result, the mining industry now provides a large part of our tax base on a substantial proportion of our basic employment. When mines are forced to cut back, or to shut down, the effect on the State's overall economy is immediate and drastic. The immediate local effect is soon felt on a broader, regional basis and it is not too long before it becomes a serious factor in the national economy. Unemployment means reduced purchasing power, and reduced purchasing power in the West is quickly felt by manufacturers in other parts of the Nation, who lose a part of their normal market.

This basic economic fact must be kept in mind at all times; but it has additional importance at a time like the present, when a widespread business recession has made the national economy more than usually sensitive to adverse influences.

I should like to point out to the committee, too, that the mineral wealth taken from the ground of our Western States over the years has played an important role in the building of America. We could not have reached our present position of world eminence without the great wealth of natural resources that are found within our own borders. Recognizing the substantial contribution of western mining to the wealth and strength of the Nation, and being aware of the large number of people who have come to depend on this great industry for their livelihoods, I maintain that it would be grossly unfair to sacrifice their industry and the people engaged in it on the altar of some new theory in foreign aid.

Turning from this short discussion of the basic philosophy of the situation, let us look at some hard present realities, as reflected in unemployment figures in my own State of Utah.

Employment in Utah metal mines in February 1958, was nearly 2,000 less than it was a year ago. This unfortunate situation was mainly caused by low prices and faltering demand for copper, lead, and zinc. In February 1957, for example, we had 1,729 people employed in mining lead and zinc. In February 1958, the number had dropped to 1,100—a reduction of almost 30 percent. The Salt Lake Tungsten Refinery, with 80 employees, was forced to close down entirely on January 15 of this year, due to the collapse of the tungsten program. The refinery had processed tungsten ores from a number of neighboring States. The fluorspar operation in Utah has been drastically cut in recent years, due to the importation of ores from northern Mexico. At a time when every agency of Government and private industry is struggling desperately to create more jobs, this is a serious situation, indeed.

In the field of nonmetal mining, the situation is only slightly less critical. In Utah coal mines, the actual reduction in number of jobs in February 1958, as compared to the same month a year ago was only 200—but the miners still on the job were working a much shorter workweek, with correspondingly less pay and less purchasing power. The average workweek in Utah coal last

month was only 26 hours, as compared with 33 hours in January 1958, and 39 hours a year ago.

It may be pointed out that not all of the job losses in the mining industry are reflected in total unemployment figures for the State. Some of the men who have lost jobs in the mines have managed to find employment elsewhere. However, this has been a matter of personal initiative, and the hard fact remains that approximately 2,000 job opportunities have disappeared—at a time when job opportunities are at a premium. I should further like to call the committee's attention to the fact that the comparisons I have cited are between February 1958, and the same month a year ago—not between the present time and a period of maximum activity in the mines.: In 1948, for example, more than 3,000 people were employed in Utah lead-zinc operations—approximately triple the number employed in February 1958. A year ago, our western mines were already hard hit by the price squeeze, and desperately in need of help. The additional deterioration in the situation in 12 months' time reemphasizes the intensity of the present crisis.

I have cited examples in lead, zinc, copper, tungsten, and fluorspar as being most typical of the problems besetting mining in Utah. I fully realize that other States have comparable problems, with other minerals, and I should like to make it clear that I am in full sympathy with them, and as concerned with finding a solution to their problems as with finding a suitable formula for the minerals that form the bulk of Utah production.

Let us turn now to look at the second of the two major issues to which I earlier referred—the question of national security.

Extreme free trade theorists sometime argue, on purely economic grounds, that no domestic industry should exist if it cannot turn out a delivered product at a price as low or lower than that offered by foreign competition. Even these extremists, however, have never come up with an answer to the question of national security. If we do not maintain the capacity to produce within our own borders the strategic materials we need in time of world crisis, we may leave ourselves at the mercy of an aggressor. The vivid memory of our experience in two world wars cannot be forgotten.

Historical analysis, looking back over the history of the two great world conflicts have marveled—and Americans have shuddered—at how close the German submarine campaign came to crippling our industrial war effort. It was touch and go in the dark days of 1942, and if Hitler had possessed a few more submarine squadrons, no one knows what the result might have been. Our potential enemy at the present time has a fleet of submarines many times larger than the maximum number ever commissioned by the Germans, under the Kaiser or under Hitler. In the event of another major conflict, the importation of large quantities of raw materials from abroad would be extremely hazardous, and the success of such a venture unlikely.

We must remember, too, that there are some critical materials that are not to be found within our borders, or not to be found in substantial quantity. Tin may serve as a convenient example. That means we may have to import some materials, and it would be foolish to share scarce shipping space with materials that might easily be produced at home.

If we are to maintain our capacity to produce strategic minerals for a time of crisis, however, we must maintain a healthy minerals industry in normal times. A ship may be placed in mothballs and recommissioned in time of war; a trifle obsolescent, perhaps, but still eminently serviceable. A factory may be shut down and later reactivated when needed with only minor delay. But an underground mine must be kept in operation or it fills with water and becomes forever useless.

Not only existing mines, but potential mines hang in balance. The success of a mining operation depends as much on long-range exploration and planning as on current operation. If our domestic mining industry is crippled, there will be no incentive for prospecting and exploration. When the day of great need arrives, we shall not know where to look for the stores of minerals we shall so critically need, even though we know they lie somewhere beneath the surface of our own land. In mining, we must keep moving steadily ahead, or we are lost.

This view was clearly expressed in the 1954 report of the President's Cabinet Committee on Minerals Policy. The report (pp. 14–15) states:

"Successful mining usually requires long-range planning and substantial investment. Today's mines are the result of exploration, development, and risk-taking over a period of many years. Exploration for mineral deposits often reqnire substantial venture capital—much of it a total loss * * *

"Mines of the future must be planned today, not a decade hence."

Before leaving this question of national security, I feel it necessary to mention two specious and highly dangerous arguments against the necessity to preserve our capacity to produce essential raw materials that I have heard advanced.

The first of these false arguments is that we have large existing stockpiles of minerals, sufficient to see us through any emergency. This is patently ridiculous. Any stockpile must be depleted in time, and we should then, if we do not preserve our own productive capacity—be at the mercy of foreign producers as I have outlined above.

The second argument is still more dangerous. This is the argument that an atomic war would be over in a maximum of 30 days, and that the source of raw materials would not be a factor in the struggle.

No man knows when the next war will break out, what it will be like, or how long it will last. There are many informed military thinkers who are convinced that there will never be a war of nucleur weapons—and God grant they may be right. The power of nuclear weapons is so terrible, they feel, that no one will dare use them when he knows his enemy has a stock of like weapons for retaliation.

If another war should come, it may likely be fought with conventional weapons and be of long duration. There may be no world conflict, but a succession of "brush fire" actions, such as we fought in Korea. In either case, we must be fully prepared for a long pull, and to neglect our sources of strategic raw materials on the premise that a future war would be decided in a matter of days would be criminal folly.

There is another economic aspect of this matter of depending on foreign sources of supply for essential minerals. The "cheap" foreign minerals have a habit of becoming expensive when our need for them becomes critical. Foreign producers, not unnaturally, boost their prices when they are in a position to dictate terms.

In 1946, for example, the year of big industrial demand for copper following the end of World War II, the price in this country of foreign copper lagged consistently under the domestic price. It was 11.7 cents a pound in January, compared to a domestic price of 11.775 cents, rose steadily through the year to a price in December of 19.183 cents a pound, still slightly under the domestic price of 19.275 cents.

Throughout the Korean conflict, however, when we were forced to buy more cooper than we could produce, the price of foreign copper was consistently a little above the domestic price.

The picture in lead and zinc is similar, but more startling. Just before the outbreak of hostilities in Korea, the price for domestic lead was 11 cents a pound and foreign lead was priced at 10.25 cents. Domestic zinc brought 15 cents a pound, foreign zinc, 14.5 cents. In July 1951, the price for domestic lead was 17 cents and domestic zinc brought 17.5 cents—imported lead and zinc brought 22.25 and 31.25 cents a pound respectively. In other words, we paid through the nose for supporting our foreign friends through normal times.

My intention is to keep this statement brief and, as I have said, to leave the more technical discussion to the more qualified experts. I shall not belabor the points I have tried to make. I trust, however, I have made my position clear. I am convinced that a sound long-range minerals policy, designed to maintain a healthy domestic mining industry in this country, is essential—

1. As a matter of equity to an industry that has done so much to build this Nation, and to the thousands of Americans who depend on it for their livelihood;

2. As a matter of maintaining a sound national economy at all times and, particularly at this time, of combating the present recession by maintaining existing job opportunities; and

3. As a matter of national security.

The details of an effective long-range minerals policy must be worked out by the experts, but the underlying principles on which it must be built are, I think, clear. A reasonable proportion of the domestic market must be preserved for the domestic minerals industry, and this must be done by setting up some effective import controls. The controls may vary in the case of different minerals, but specific recommendations in each case have been offered by representatives of the industry.

If the terms "a reasonable proportion of the domestic market" and "effective import controls" sound too vague, let me again refer the committee to the two

resolutions of the western governors which I included in this statement. The 1958 resolution, passed at Colorado Springs, requests that "at least one-half of the domestic market, or the present proportion of the domestic market (whichever is higher)" be preserved for the domestic producer of minerals. This, I think, is both specific and eminently reasonable. The 1957 resolution, passed at Reno, urged that import controls be designed to offset "the differentials in the economic structures of the various world producers of minerals * * * to permit the domestic minerals industry to operate on a basis of normal supply and demand, with only the amount of protection needed to adjust the differentials previously referred to." Again, I think this is both clear and fair. The American mining industry is not asking favors, it is asking only the opportunity to compete in its own market on a basis of efficient production.

I thank the committee for this opportunity to present my views.

Governor RUSSELL. I also have the statement of Gov. Goodwin J. Knight, of California, sent to the Senate Committee on Interior and Insular Affairs.

STATEMENT OF GOV. GOODWIN J. KNIGHT, OF CALIFORNIA

GENTLEMEN: Thank you for your kind invitation to meet with your committee to discuss some of the mining and mineral problems confronting the States and Nation at this time. It is with sincere regret that I am unable to appear before your committee personally, due to the many major problems under consideration during the present session of the California Legislature. I am therefore asking Gov. Charles H. Russell, of Nevada, to present my statement to your committee.

As a member of a gold mining family of the West, and as chief executive of a State whose history is based on the mining industry, I am keenly aware of the serious difficulties facing the mining industry today. As a student of both domestic and foreign affairs, I am also aware of the serious international problems confronting the Congress and the administration in connection with exports and imports of minerals and other commodities, and the difficulties encountered in maintaining an adequate trade balance between our domestic producers of both minerals and goods, and the friendly nations whom we are helping to become more self-sufficient.

In arriving at a solution to these complex domestic and international problems, means must be found to enable us to support a reasonable level of domestic metal mining and at the same time permit an equitable level of imports and exports for our friends abroad.

The situation in regard to gold is, in my opinion, extremely critical. The American dollar has depreciated drastically in value since the price of gold was established at $35 an ounce in 1934. I believe that one of the factors contributing to the present level of unemployment in this country is the low domestic price of gold.

During a major part of the past 20 years there has been a seemingly insatiable demand for raw materials and manufactured products, all in short supply. This is not now the case. While unemployment has been increasing and business profits declining within the United States, we still see increasing imports of tuna, plywood, textiles, metals, and minerals, as well as of manufactured products, at prices below the cost of production in the United States. It is my belief that if the price of gold had been maintained in strict relationship to its price in the world market, we would not be in as critical a situation as we are today.

I believe it is safe to say that we can see diminishing exports and increasing imports of many raw materials and manufactured products under present conditions; and this, if allowed to continue, may well force a heavy drain on our Fort Knox gold reserves. From information released by the Treasury Department, it appears that a relatively small increase in the foreign demand for gold—a demand we are committed to meet—could seriously affect or eliminate our gold reserves in a very short time. On the other hand, a realistic approach to the gold value of the dollar and a valuation of the dollar at its rightful relation to gold bullion would in itself eliminate excessive imports and in addition put the gold mining industry back to work in the United States. If these steps are not taken before we lose our Fort Knox gold reserves, there appears to be a grave possibility that further shrinkage in the value of the dollar would automatically occur, once our gold reserves had been depleted.

Insofar as lead and zinc are concerned, all of our California mines are closed; and the present legislation before Congress, which would limit some of the excess imports of lead and zinc into the United States, is both reasonable and necessary.

We have copper in California which could be produced under a reasonable market price, but which definitely cannot be produced without loss at current prices. If we merely measure the cost of producing copper in terms of our own devalued currency, then any market price of copper below 36 cents might well be termed a bargain. I feel that the copper legislation already introduced in Congress is a reasonable proposal.

For over a hundred years California has been by far the largest producer of mercury in the United States. I am quite confident that California can continue to support a large part of the Nation's mercury requirements for many years to come; and I certainly hope that your committee will see to it that this country never becomes wholly dependent on foreign sources of this strategic metal, as it so nearly did in 1949.

There are many other metals which need individual attention; such as chrome, of which California has probably the largest reserves of any State in the Nation; nickel, which occurs in Oregon, and which may well occur in appreciable amounts in California; tungsten, of which we have one of the large deposits in the United States, although, under present excessive imports and depressed prices, it is doubtful that production can long continue; cobalt, antimony, asbestos, manganese, and the rare earth metals, of which California has the largest and richest single deposit in the United States, possibly in the world.

May I respectfully urge that we exert our utmost efforts to make certain that at least one-half of our mineral requirements are obtained from the United States and its possessions, and that only under extreme cases shall foreign mineral imports be permitted to exceed their allotted share of United States consumption. Such a policy would assure our friends and allies abroad one-half of the United States market; but certainly, national security in times of emergency and national welfare in times of peace require that we should not willingly become more dependent on foreign sources. I am confident that the free nations would realize that this policy is both fair and reasonable.

Governor RUSSELL. Speaking on behalf of the 11 western governors—and, later on, I wish to also file the resolutions which were passed in 1957, and read into the record the resolution that was passed at Colorado Springs at the western governors' conference a month ago—I appreciate the opportunity of appearing before this Senate committee, and welcome the opportunity to explain to you why it is essential to domestic mining that Congress formalize a long-range minerals policy and give aid to those metals which, on account of low prices, have resulted in creating a critical condition in the mining industry in the Western States.

The importance of Nevada as a mining State is evidenced by the fact that, to date, the total value of our metal and mineral production is approximately $2½ billion.

In the year 1955, the value of our mineral production was $115,219,751; in 1956, $126,234,615. However, in 1957, the value of the production dropped to $83,663,000, or nearly $43 million less than in the previous year.

In the years 1955 and 1956, Nevada ranked first in the value of tungsten production. In 1957, it was second only to California. In 1955, the value of our tungsten production was $22¾ million; in 1956, $19,263,000; in 1957, only $1,802,000.

For the past 3 years, Nevada has ranked fourth in the production of copper, but the value of our copper production dropped from $70,450,550 in 1956 to $46,620,000 in 1957. We rank first in the value of manganese produced and second in the value of mercury.

We have recently become a rather important producer of iron ore, as the value of our iron-ore production in 1957 was about $214 million, f. o. b. the mines.

We also produce large quantities of gypsum, barite, magnesite, limestone, and other nonmetallic minerals.

In the past, Nevada was famous for its gold, silver, and lead mines. The value of our gold and silver output, to date, will total nearly $1 billion.

Since the turn of the century, the camps of Tonopah and Goldfield have produced approximately $240 million in gold and silver, but at the present time practically all of our gold and all of our silver are produced as byproducts of so-called base-metal mines—namely, copper, lead, and zinc.

At the present time, there is practically no gold-mining industry in Nevada, due to the fixed price of the metal which has prevailed for the past 24 years, plus the high cost of production, occasioned by the high-wage scales prevailing in the State and the cost of all materials and supplies entering into the cost of mining.

At one time, Nevada was the leading lead-producing State in the Nation, as the camp of Eureka, in Eureka County, during its peak years of production had an output of 200,000 tons of lead. At the present time, the largest lead-zinc mine in Nevada, in Lincoln County, is closed due to depressed prices for metals. Two small lead-silver mines are operating in Eureka County on a curtailed basis, but these mines are producing a relatively high-grade silver-lead ore and are continuing limited production through selective mining.

The copper industry in our State is at the lowest ebb in many years, due to severe decreases in the number of men employed and the consequent curtailment of production.

The present situation in the mining industry in Nevada has had a serious impact upon the economy of our State. Nevada mines pay taxes not only upon their physical assets, such as plants, facilities, inventories, et cetera, but, in addition, pay what is known as a net-proceeds tax, which, for all practical purposes, is the equivalent of a State income tax on mine profit.

In the year 1956, Nevada mines paid a net-proceeds tax of $1,162,601; in the year 1957, this tax totaled only about $450,000.

Mine employment in Nevada was 3,500 less in March of this year than in July 1956, and 2,300 less in December of 1957 than in December of 1956.

And when you realize that in the State of Nevada the small towns grew up about the mining community, and their growth, development, and their very livelihood is dependent upon the mines, then you realize the seriousness of the situation, as far as many of the towns in the State of Nevada are concerned, with mining being at the low ebb it is.

Economists estimate, on a national basis, that for every man on the job in a basic industry it takes four men in service industries to keep him employed. If these figures are correct—and I have no reason to doubt them—14,000 people have lost employment since July 1956 due to present conditions in the mining industry in Nevada.

I have been concentrating on the metal-mining problems of Nevada, but the metal-mining problems of the adjoining States are equally important.

Thus, for Montana, it is essential that early relief be provided for copper, for lead-zinc, for tungsten.

For mines of the State of Idaho, where lead and zinc are also important, an early solution to this problem is essential. Also, copper, tungsten, and mercury are important to the economy of that State.

So far as Washington is concerned, lead, zinc, and uranium are problems of importance faced by Governor Rossellini.

In Oregon the sad situation in the gold industry, the problems of mercury, and the early termination of the chrome program add to unemployment.

In California, the closed gold mines of the mother lode, the closed lead-zinc mines in the southeastern part of the State, the problems of low-priced copper, the mercury problem, and the termination of chrome mining are of utmost importance, as, for many decades, California's prosperity was based upon the mining industry.

In Arizona, the slowdown in copper production, due to excessive imports, is having a very serious effect upon the State's economy, and the not too distant termination of the manganese program and the uncertainties facing asbestos are of increasing concern to Governor McFarland.

Governor Mechem, of New Mexico, also has the problem of slowdowns in the copper industry and difficulties and uncertainties in the uranium program.

The State of Colorado is concerned with almost every metal I have mentioned, and to those must also be added fluorspar.

In Utah, the situation in the copper and lead-zinc industries is having a very serious effect upon that State's economy.

Governor Simpson, of Wyoming, is concerned with excess imports of oil, lack of facilities for uranium processing, and other problems related to the mineral industry of his State.

The governors of all of the Western States are facing serious unemployment problems. This, plus the inability of the Western States to purchase manufactured and other products from various sections of the country, due to the depressed condition of the mining industry, is affecting the general economy of the Nation.

I am submitting, for the record, copy of a resolution adopted by the western governors at their conference in Reno, Nev., on April 26–27, 1957, and the recommendations of their mining advisory council, referred to therein. And, also, resolution by the western governors at their conference in Colorado Springs, February 23–26, 1958, relating to metal and mineral mining, which I would like to read before this committee, if it is permissible.

Senator BIBLE. Yes; you may read the resolutions. This is the resolution of April of last year?

Governor RUSSELL. That is true. And I wish to file with the committee a copy of the resolutions that were adopted in 1957.

Senator BIBLE. The resolution of 1957 of the western governors will be incorporated in full in the record.

(The 1957 resolution referred to follows:)

RESOLUTION BY THE WESTERN GOVERNORS RECOMMENDING A NATIONAL POLICY FOR MINERALS

Whereas, the western governors' conference met in Reno, Nev., on April 26 and 27, 1957, and accepted the recommendations of its mining advisory council for further study; and

Whereas, two World Wars and the Korean episode have clearly shown that in times of emergency, when more than normal amounts of metals are needed, metal supplies from foreign sources decrease; and

Whereas in times of future emergency, Russia's tremendous submarine fleet would effectively eliminate the possibility of metal importation from overseas; and

Whereas the United States Government has definitely stated the necessity for a "healthy domestic mining industry"; and

Whereas one of the three principal sources of tax income which maintains the governments of three-fourths of the Western States is the mining of minerals and solid fuels; and

Whereas much of the money available to the citizens of those same States for the purchase of the manufactured goods of the East is derived from the minerals industry; and

Whereas because of decreased tariffs over the last 20 years and the multiplication of this effect by domestic inflation, mining developments have become unattractive in the Western States and more attractive in foreign countries; and

Whereas it is evident that unless the United States producer is assured of a fair share of the domestic market, he cannot justify continued operation; and

Whereas such a program, if adopted by the Congress and the various agencies affected, would—

(*a*) Decrease the tax burden on the people of the United States;

(*b*) Increase the revenue to the Government;

(*c*) Decrease the number of Federal employees;

(*d*) Increase the security of the country in time of future emergency; and

(*e*) Maintain the economic stability of the Western States.

Now, therefore, be it

Resolved, That Congress rectify the errors in past tariff reductions by the imposition of import control, so that the ratio of domestic production to domestic consumption shall not fall; and be it further

Resolved, That the following actions are recommended:

1. As to cobalt, copper, lead, zinc, tungsten, mercury, and fluorspar, that excise taxes be imposed on foreign imports above the present tariff levels but, in most cases, less than the ad valorem rates of 1939; and

2. As to antimony, asbestos, chrome, and manganese, that very small excise taxes be imposed on foreign imports, the proceeds of which should be used to maintain a healthy nucleus of domestic production in these strategic metals; and

3. As to coal, that the Government give equal consideration to all available energy resources before deciding which is to be used in generating power in any given area; that the Leasing Act be amended to permit greater single ownership of Federal coal lands; and that the quota limitation on oil imports be diligently reviewed; and

4. As to columbium and tantalum, that adequate stockpile appropriations (considerably less than a million dollars per year) be enacted to maintain a market for domestic production of these crucially high temperature metals; and

5. As to gold, that the errors of expediency which have closed the industry in the Western States be corrected; and

6. As to potash, that the antidumping laws be made effective; and

7. As to phosphate, that the inequities in present laws regarding limitations of acreage because of State lines be removed; and

8. As to rare earths and tin, that the United States Geological Survey and the United States Bureau of Mines continue and expand metallurgical and "use" research on the former, and geological studies in Alaska on the latter; and

9. As to thorium, that the Atomic Energy Commission either set up a program similar to uranium for its acquisition, or free it from Government control as to purchase and utilization; and

10. As to all metals, that the "Buy American" legislation be observed and that no contract be granted to foreign producers more favorable than terms offered domestic producers; and be it further

Resolved, That the recommendations of the Western Governors Mining Advisory Council be attached to this resolution and that the detailed information contained therein be available as a basis on which legislation may be developed; and be it further

Resolved, That copies of this resolution be forwarded to the Congress of the United States, and to such branches of the executive department as may be directly concerned.

In witness whereof, the members of the western governors' conference have approved and adopted this resolution on the dates hereinafter set forth opposite their respective signatures.

Governor RUSSELL. This is a copy of the Western Governors Mining Advisory Council recommendations that were made in 1957. Later I would like to read into the record the resolutions then that were passed at the recent governors' conference in Colorado Springs.

Senator BIBLE. The recommendations which were made by the Western Governors Mining Advisory Council, at Reno, Nev., on April 24–25, 1957, will likewise be incorporated in the record.

(The material referred to follows:)

WESTERN GOVERNORS MINING ADVISORY COUNCIL, RENO, NEV., APRIL 24–25, 1957

INTRODUCTION

The Western States are heavily dependent upon the extraction of minerals and fuels for their basic economies. That interdependence is increasing through industrial development and growing markets. To whatever extent each of the States produces minerals and metals, such production represents new wealth—wealth which is spent widely for the products of other Western States. When mineral production is curtailed, the economic effect is felt both in the immediate area and in areas from which purchases are made. A recent study in one western State indicated that 40 percent of its tax revenue came directly from its mining industry and, further, that 70 percent of the exports from that State were either mineral or metal raw materials, or manufactured products made from its mineral raw materials. Those exports financed, for the citizens of the State, the purchase of numberless commodities not produced in the State, thereby providing trade and employment for those areas producing the purchased commodities.

Domestic mining, particularly those segments producing materials in competition with similar products from foreign sources, has, in varying degrees, been affected by discriminatory duty reductions of raw materials under the trade agreements program and by the application by Government of short range, expedient policies in lieu of a long range mineral program containing basic import control measures. As a result, the objectives of a "healthy domestic mining industry" and "strong mobilization base" endorsed by the Cabinet Minerals Policy Committee, and by the President, have fallen far short of achievement.

Government mineral policy has consisted of pleas for increased production during war and national emergencies, and of indifference to the industry when adequate supplies again became available.

Causes contributing to the present plight of the domestic mining industry are numerous and complex, including:

(1) Increased labor, supply, transportation, and utility costs without compensating increases in price.

(2) Government loans, grants, and floor price contracts granted to foreign producers on the erroneous basis of "have not" appraisal of domestic mineral productive potentialities.

(3) Drastic reduction of the effectiveness of rates of duty on imported minerals and metals. Because of price increases and tariff cuts negotiated under the Trade Agreements Act, the fixed duties on minerals and metals have declined from an average of about 40 percent of the market price in 1939 to less than 10 percent at present—a reduction greater than that experienced by any other major domestic industry. Duties on most metals and minerals are considerably below a level necessary to protect the American workingman and investor from similar materials produced abroad under conditions intolerable to the American workingman and often prohibitive to free enterprise investments.

(4) Failure to gain needed relief from harm caused in negotiated trade agreements under the escape clause, peril point, and national security provisions of the Trade Agreements Act. The council, therefore, urges the Congress of the United States to resume its constitutional responsibility to regulate foreign trade.

(5) A tax structure unfavorable to investment of venture capital in the long-range activities of mineral exploration, development, and research, resulting in an inadequate testing of domestic mineral potentialities and a loss in ultimate tax revenue.

(6) Threats of rights of location and patenting of mineral rights under existing statutes and excessively high withdrawals of public domain for questionable need.

(7) Prolonged extensions of the stockpiling program and recent introduction of the barter program in lieu of basic import controls, as the primary basis for aid to the domestic mining industry. Such programs have been recognized by the industry, by the administration, and by many Senators and Congressmen as being short-range solutions, serving only to afford relief to the industry until a long-range mineral program, providing a permanent basis of encouragement for development of a healthy domestic mining industry could be prepared and adopted.

The Congress, in recent actions regarding appropriations for both specific and general stockpiling programs, has exhibited impatience with temporizing, costly policies, forecasting termination of phases of, if not all, mineral stockpiling programs.

Congress recognized the lack of justice in the unfair competition furnished by excessive imports when it amended the Trade Agreements Act to aid the escape clause, the peril point and the national security provisions. However, those protective devices have failed even when the mining industry presented adequate proof of damage.

The State Department is still disposed to further reduce tariffs on metals and minerals, all raw materials in fact, to improve its bargaining position with others, irrespective of the effect on the domestic economy or on the capacity of the industry for continued production.

So long as these two conflicting policies continue, mining suffers in the vacuum of inaction created. If the President's desires are to be attained, they can only be realized by assuring to the domestic mining industry their fair share of the domestic market. By whatever means that fair share is assured, it can only be preserved by excluding from the domestic market any foreign supplies in excess of need.

It is historically true that, when world metal shortages exist, the United States falls far short of obtaining needed supplies, but when surpluses exist, the full free world supply floods our market, causing depressed prices and domestic mine closures.

Regardless of their views on the issue of import controls or import freedom, there are few who will dispute the claim that mining has been seriously harmed by the extent of import freedom established through trade agreements since the 1934 act was passed. The differences arise in the form of relief needed.

In requesting equitable import controls, the domestic mining industry asks basically for only such protection as is necessary to insure continuity of enterprises whose costs of producing raw materials are consistent with the level of our domestic economy. Those costs involve consideration of comparative wages, taxes, supply cost, transportation to market, and average grade of the source material.

Tariff forms, at present, vary through ad valorem, fixed rate, distribution of tariff receipts to domestic producers, and an excise tax on imports applicable only when domestic price falls below a stipulated level. Tariffs on manufactured goods are usually on an ad valorem rate, while fixed rates are prevalent on raw materials—a condition which has served to effectively reduce the measure of protection as prices increased in the inflation of the past 15 years. No one type of tariff may be practical for application across the board to all segments of the mining industry, but in the following recommendations, tariff needs are presented and preferences stated by qualified representatives of the numerous segments of the industry attending the conference.

Recommendations are hereinafter presented on the numerous problems outlined above, for the earnest consideration of the western governors. The recommendations made, in the carefully considered opinion of the delegates to the conference, form the framework of a national mineral policy on which can be established a healthy domestic mining industry, capable of providing an adequate mobilization base and serving its true function in our domestic economy.

ANTIMONY

Less than a decade ago, domestic mines supplied 42 percent of domestic primary consumption, while today they supply less than 5 percent. In wartime, requirements for antimony are at least 4 times the peacetime rate. (These figures do not take into account the amount of antimony in antimonial lead, which is not available for primary antimony uses.)

Domestic antimony mines are unable to compete with low-cost imports. Accordingly, domestic antimony mining, milling, and smelting plants have been shut down and dismantled.

The council recommends that—

(1) Minimum tariff or excise rates be established—

(*a*) on antimony ore and concentrates at not less than 15 cents per pound of contained antimony; and

(*b*) on antimony smelter products at not less than 30 cents per pound of contained antimony.

(2) If it is not possible to obtain such tariffs or excises, then a tariff or excise of 6 cents per pound on contained antimony in imported antimony metal, oxide, ores, or concentrates should be established. The proceeds of this tariff must be distributed to the producers of primary antimony, produced and sold within the United States, in proportion to their production.

ASBESTOS

Arizona is the sole domestic producer of strategic grade asbestos. Lack of congressional appropriation for the Government buying program has caused most mines to shut down and places in jeopardy Arizona's progress toward establishment of self-sustaining milling and sales facilities adequate to handle all grades of fiber.

Since 1938, United States production of asbestos has varied from 1 to 8 percent of domestic consumption. The predominating interest of domestic consumers and the domination of the market by Canada make relief by tariff politically difficult.

The council recommends that—

(1) Congress be requested to appropriate funds to carry out its expressed obligations to purchase asbestos.

(2) The life of the asbestos program be extended until the stockpile goal for long-fiber asbestos has been met.

(3) The present standards of quality be retained.

(4) An excise tax be imposed upon imported low-iron asbestos, the proceeds to be used to preserve a domestic asbestos industry.

CHROME

Consumption of chrome in the United States in 1956 was 9 times greater than 30 years ago, 2½ times greater than 10 years ago, and 17 percent higher than in 1955. Despite the increasing demand for chrome, domestic production is negligible because it cannot compete with imports of ore mined by low-cost labor abroad.

A chrome mining industry to supply the West's expanding steel and electroprocess industries could be established if an excise tax were placed on imports of chrome and the resulting receipts distributed among domestic producers.

A program in line with the existing national policy of import tariffs on processed chrome products is necessary in order that the domestic chrome mining industry continues as an important part of the industrial economy of the West.

Accordingly, the council recommends that—

(1) An excise tax equal to five-eighths cent per pound on contained chromium metal in imported chromite ore be established.

(2) Proceeds of this tax to be allocated, pro rata, to the producers for chrome mined and sold in the United States.

(3) The amount of the allocation to be the difference between the Atlantic seaboard price of chrome on the day of the sale and the equivalent of the 1956 GSA purchase price extended to include all grades of chrome, and adjusted annually to the United States Bureau of Labor statistical indexes.

(5) Expense to the Government attendant to collecting the tax and making the allocation to be borne by the excise tax.

COAL

Coal production in Colorado, New Mexico, Utah, Washington, Montana, and Wyoming has suffered a sharp decline during the past 10 years. The greater

part of this decline has resulted from the shift of the major railroad companies from coal to diesel fuel for their motive power.

Coal is a vital force of energy. Power companies in the West are looking for suitable areas to establish generating plants and should be given, on a State and Federal level, all legitimate assistance available.

The council recommends that—

(1) The Government give equal consideration to all available energy resources before deciding which is to be the source of generating power in any given area.

(2) The States foster and the Federal Government assists in establishing research centers to develop better uses for coal and its byproducts.

(3) The Leasing Act of February 25, 1920, be amended to permit any 1 person, association, or corporation to lease not more than 20,480 acres of Federal coal lands. The present acreage limitation on such leases is far too small to meet modern requirements for large-scale coal-mining operations.

(4) Quota limitation upon oil imports be diligently reviewed by the responsible Government agencies under existing statutes providing for such studies.

COBALT

Development of cobalt in the United States started in 1950. The United States Government requested that the planned capacity be doubled. Ultimately, a 50-percent increase was made with the agreement that a premium of 20 cents per pound was to be paid on 6,500,000 pounds. This premium was later canceled because of reasons beyond the producers' control.

World prices have declined and domestic producers can no longer compete in the market dominated by foreign production.

Domestic sources of this strategic metal should be maintained in a state of productive availability.

The council does not consider that the domestic cobalt producers should receive treatment less favorable than that which is awarded foreign production.

The council recommends that the General Services Administration be directed to enter long-term purchase contracts with domestic producers at a floor price of not less than $2.35 a pound.

COLUMBIUM-TANTALUM PROGRAM

Prior to 1956, the importation of columbium-tantalum from foreign sources was 99.99 percent. Imports of columbium-tantalum could practically be eliminated and 25 additional strategic metals could be recovered as byproducts if the current Government purchasing program is continued.

The purchase program would encourage large and small operators alike to prospect, develop, and put into production new mines, and conserve many losses of these materials that are now being wasted because of inadequate programing and facilities.

To develop a new and unique metal-mining industry in the Western States, which would bring additional capital, revenue, and employment, plus the chemical and steel plants, and the allied industries into the areas, the council recommends that the Government continue the domestic purchase program for columbium-tantalum, and expand it to include euxenite and/or samarskite which are found in combination with the aforementioned metals.

COPPER

The situation in the domestic copper industry has changed materially during the past year. This situation is serious enough to warrant an accurate appraisal of conditions for the determination of reasonable import protection against the foreign producer for the following reasons:

(1) A prolonged period of shortage of the metal has given way to a pronounced surplus.

(2) It is evident that current free-world production is clearly in excess of demand by a production in 1956 of 3,015,000 tons against a consumption of 2,818,000 tons.

(3) Approved, scheduled projects will increase free-world productive capacity to 4,157,000 tons per annum by 1961. Much of this increase was solicited by the United States Government to provide for national security.

(4) To maintain an economic operation, the American operator, with low-grade ore and high wage scales, requires full-scale production schedules.

(5) The peril point of 24 cents when the excise tax is to apply was established in 1951 when wage scales were 42 percent below their present levels and other items of expense also were proportionately lower.

(6) The 4-cent excise tax enacted in 1932, later reduced by trade agreements in Geneva in 1947 to 2 cents, was also established at a time when operating costs were way below present levels.

The council recommends that both the peril point and the excise tax be examined in order to determine whether or not the American producer is being reasonably protected.

GOLD AND SILVER

The United States Government remains the sole purchaser of gold at a price, fixed 24 years ago, when the dollar possessed 3 times its present purchasing power. This fixed price, combined with inflation and rising costs, continues to force gold mines out of existence. The right freely to own and to buy or sell gold in a free market is still denied to the American citizen.

The place of silver as a monetary metal is well established. Domestic mine production declines while consumption for both industrial and monetary needs increases. Acquisition by the Treasury of domestic silver for monetary needs must be continued, and stocks so acquired held inviolate. The council calls attention to the present sales of Treasury silver below world market prices when the Secretary, under present authority, could preserve stocks by setting higher prices.

The council recommends that—

(1) Congress enact legislation to abolish the present restrictions on the purchase, ownership, and sale of gold and silver, and to restore the traditional rights of the citizens to freely posesss, process, buy, and sell these precious metals.

(2) To insure a sound currency, the Treasury should continue to purchase all newly mined domestic gold and silver tendered.

(3) Neither gold nor silver be sold by the Treasury from its present stocks, or from future acquisitions, for other than monetary purposes. This restriction is necessary to the preservation and strength of our monetary system.

(4) Congress enact legislation establishing a joint committee to investigate the gold-mining industry, providing for hearings to be held in gold-mining districts in the United States and Alaska.

LEAD AND ZINC

The lead-zinc industry during war years made maximum effort for greatest possible production. Substantial recovery was made in early postwar years toward development of reserves and replacement of equipment. However, excessive imports under drastically reduced duties, beginning in 1949 and resumed in 1952, retarded such recovery and closed many mines. Legislation to increase tariff protection was defeated and a unanimous recommendation for tariff increases by the United States Tariff Commission was denied. Stockpiling was substituted as a temporary relief measure in 1954 and has subsequently helped support domestic prices of 16 cents for lead and 13½ cents for zinc—approximately the 1947 price level for those metals. Imports continued at high levels and foreign producers were greatly benefited by the stable price level. Expansion was continued in foreign production potential while most domestic lead-zinc operators found the price levels only adequate to sustain continued liquidation of existing ore reserves.

The "barter" program has increased the area of price support for foreign production for we now find "Soviet" zinc being sold in European markets in the place of free world zinc being shipped to American stockpiles. Thus, the temporary relief program for lead-zinc in stimulating foreign production and imports has improved the competitive position of the foreign producer but failed to provide a healthy base for domestic operations. This program has further served to establish the United States as the purchaser of world surplus supplies at the expense of the American taxpayer.

The council again recommends that:

As excise tax of 2 cents per pound be established on imports of zinc and lead to take effect whenever the price of zinc falls below 14 cents, East St. Louis, and the price of lead below 16 cents, New York.

The council repectfully presents the qualifying explanation that factors of cost have increased substantially since the duty level and the price applications were proposed in 1955 and, therefore, upward revision can justifiably be considered in any implementing legislation.

The present stockpiling of lead and zinc should be continued until such an excise tax is put into effect.

MANGANESE

Our country has had 3 narrow escapes from disaster during 3 wars because there has been no domestic manganese production. Congress has recognized this hazard to the security of our country and it has established four procurement programs to encourage and stimulate exploration, development and production of domestic manganese producing deposits for terminable periods under fixed quotas, specifications, and price.

Two of these programs, the one at Wendon, Ariz., and another at Deming, N. Mex., have expired as the quotas allotted to these depots have been procured.

The other two, the depot at Butte, Mont., and the so-called carlot program are in operation, but the duration of these programs is limited.

Although the relative size of these domestic programs in relation to the Government-supported foreign programs of manganese procurement is nominal, the record shows conclusively that these programs have made significant contributions toward the creation of a domestic manganese producing industry.

Through these programs, manganese-bearing minerals, which would otherwise lie dormant as worthless deposits, have been converted into new material wealth and national income.

The funds derived by the numerous manganese participants have been plowed back by these participants into further explorations, metallurgical research, and the development of new manganese deposits to serve as underground inventories of national wealth contributing to the prosperity and security of America.

These incentives to the creation of this new domestic industry should be revitalized and extended until such time as this new domestic manganese producing industry has matured economically into a profitable member of American industry entirely independent of any Government support.

The council sponsors generally any legislation deemed to be reasonable by congressional experts and congressional committees which are purposed upon the nourishment of this young American mineral industry.

More specifically, the council recommends—

(1) A tariff be established of 7 cents per pound of contained manganese in imported foreign ores;

(2) If the stipulation in paragraph 1 is impossible, then a tariff or excise tax equivalent to one-half cent per pound of contained manganese be imposed, the proceeds being distributed to domestic producers on the basis of each domestic producer's unit production produced and sold;

(3) The limitation of 10,000 tons on the carlot program be eliminated until the provisions of either paragraph 1 or 2 are adopted;

(4) If the recommendations in paragraphs 1 and 2 are impossible, then a program similar to the present carlot program should be put into effect over a long term of years.

The council suggests that every effort be made to obtain a treatment plant at either the Deming, N. Mex.; Butte, Mont.; or the Wenden, Ariz., depot to beneficiate stockpile ores to usable grade.

MERCURY

The mercury industry in the United States, prior to World War II, supplied approximately two-thirds the domestic requirements, with a 25-cent-per-pound tariff, equivalent, on an ad valorem basis, to 33⅓ percent.

In 1943, the domestic mercury industry produced all the wartime requirements of the United States, its European allies, and Russia. In 1949, due to Government neglect and cartel activities abroad, the mercury industry of the United States fell to less than 10 percent of domestic consumption. No United States mercury producer has been able to sell domestic metal to the Federal Government for stockpiling, or other purposes, for a period of 14 years. None of the principal United States producers have ever received a price above the open market. The domestic stockpile is filled almost entirely with foreign material.

At the present time, the domestic industry is producing approximately the

same amount of metal but less than one-half of United States peacetime requirements.

Due to inflation, the present 25 cents per pound tariff represents 8 percent ad valorem.

The domestic mines can be closed down by foreign producers at will after the expiration of the present Government floor price, which is and has been uniformly well below the market price.

The industry, under present conditions, has an assured future of 20 months.

The council recommends the establishment of an excise tax of $1 per pound on imports of quicksilver, to take effect whenever the price of quicksilver falls below $250 per flask, New York.

PHOSPHATE

Since 1940, the Western phosphate industry has made remarkable strides in the development of the vast deposits in Western States. A completely new chemical industry is coming into existence to implement the economy of those States. In order to accelerate and strengthen this development, the council recommends that:

The Congress of the United States enact into law pending legislation which permits 1 lessee to hold up to 10,240 acres of Federal land under lease from the United States irrespective of which State or Territory the land under lease is located. The present law limits the permissible acreage to 5,120 acres per State with a total of 10,240 acres anywhere in the United States.

POTASH

Within the last few years, potash, suspected to have originated from behind the Iron Curtain, has been dumped on the domestic market. Because of the tremendous reserves of potash which are known to exist in Europe, particularly in the Communist-dominated countries, there is an ever present threat to the survival of the American industry if any large-scale dumping is permitted to occur.

The council recommends that—

The domestic potash industry be provided adequate protection against dumping of foreign potash in the United States.

Congress enact legislation providing for the automatic invocation of penalties against dumping whenever the Government has reason to believe that an act of dumping is about to occur or is in process.

RARE EARTHS AND THORIUM

Rare earth, thorium economics

Previous to 1950, there was practically no known domestic supply of ores containing the 15 rare earth metals and thorium. The Atomic Energy Commission, working through other Government agencies, private corporations, and individuals, conducted extensive exploration programs to find domestic sources of these essential metals.

This work resulted in finding sources of supply in California, Idaho, and other Western States.

Private corporations were urged by Government agencies to start production of these metals with private capital.

After the partial development of the domestic production, substantial sources of these ores were found abroad and were being brought into this country duty free. As a result, domestic production has been paralyzed.

The council recommends that the Government—

(1) Conduct and encourage research in the utilization of rare earths.

(2) Either establish and publish an adequate purchasing program for thorium or declare it to be a freely marketable metal.

TIN

The council suggests that the United States Geological Survey and the United States Bureau of Mines make an adequate investigation of the possibilities of commercial production of tin in Alaska so that the Territorial government may have reliable information on which to encourage development, if such development is justified.

TUNGSTEN

The ups and downs of the domestic tungsten mining industry for the years 1940 through 1956 are reflected in the production figures—a low of 2,896,084 pounds in 1949 and a high of 15,833,000 pounds in 1955.

Consumption also has sharp swings—a low of 4,037,000 pounds in 1954 and a high of 19,313,000 pounds in 1943.

Although production is now much greater than consumption, it is worth noting that consumption during the World War II years of 1941, 1942, 1943, and 1944 was greater than the peak production year of 1955. Spurred on by the Korean war and the low-production year of 1949 and the desire to have a strong domestic tungsten mining industry, a Government-buying program has been in effect in recent years and the overall success of the program was much greater than expected. Consumption during this period has been held down due to Government restrictions on the use of tungsten and regulations to "design around" tungsten because of the so-called scarcity of tungsten in this country, based on the "have not" theory. Because of a current adequate source of domestic supply, some of these restrictions have been rescinded.

Unless some remedial steps are taken, the domestic tungsten mining industry will again go from the "feast" to "famine" stage and tungsten will again become a critical metal in short supply instead of one in adequate supply and restrictive regulations on the use of tungsten will hold back consumption. One remedial step would be for the Government to refrain from offering on the open market the Korean and Bolivian tungsten concentrates which it is purchasing, in the amount of 50,000 units per month. We are furnishing these countries with the funds to purchase facilities and for operating expenses, as well as purchasing their tungsten concentrates, which are being offered on the market in direct competition with United States producers. These producers pay no United States income taxes.

The council recommends that—

(1) An adequate duty on tariff of $1.60 per pound of contained tungsten be established to enable the domestic tungsten mining industry to stand on its own feet and compete with the low-cost foreign producers.

(2) If it is impossible to obtain such tariff, then quotas on tungsten imports be establish to insure a fair proportion of the domestic market for the domestic tungsten mining industry.

(3) Congress observe its legal obligation to carry out the intent of the law passed at the last session of Congress, authorizing an interim purchase program, in the same manner that the Government honors contracts for the purchase of tungsten concentrates from foreign countries.

The council suggests that, unless (1) or (2) or (3) are put into effect, an adequate mobilization base cannot be maintained, nor will there be an assurance of a source of supply for expanding peacetime requirements.

URANIUM AND VANADIUM

The council recommends that:

The AEC continues its efforts to encourage private industry to undertake a greater share of all phases of the industrial atomic program in order that industry be prepared to take over greater responsibility when, as Government stockpile requirements are met, the Government reduces its monopolistic control. Within the past year, the Government has yielded a measure of its monopoly of purchase and use. Further modification is desirable as national stockpiles are met.

The AEC has established a fixed price for concentrate and has given thoughtful consideration to many of the industry's problems. Accordingly, with a view to encouraging maximum domestic production, it is urged the Commission reappraise the fixed price periodically, taking into account increased production costs, in order that a stable and healthy industry be maintained.

Also, having in mind the comparable experience of certain other minerals, it is again urged that, in all future uranium purchase programs, the domestic industry be given paramount consideration. It is also urged that the penalties still being imposed for high lime uranium ores be eliminated.

It is noted that the definition of a mining property, as it affects the million pounds per property limitation, remains ambiguous, and should be clarified in a new AEC directive. Under existing conditions, many small operators in newly developed areas of Washington, Oregon, and Wyoming are unable to find a market for their ore.

Therefore, it is recommended that the Commission give further study to providing adequate interim remedial measures.

"ESCAPE CLAUSE" ACTIONS

Operations of the so-called escape-clause relief provided in the Trade Agreements Act, has not worked to the benefit of the domestic mining industry. At present, investigations of industry pleas for escape clause relief are conducted by the United States Tariff Commission and the resulting reports are made to the President for action.

The council firmly believes that control of tariffs and operations under the Trade Agreements Act are the responsibility of Congress.

Accordingly, the council recommends that the western governors urge their congressional delegates to seek early enactment of a measure now pending before the Senate which would require reports on escape-clause investigations by the United States Tariff Commission be sent to Congress for action instead of to the President.

LANDS

The economy of most Western States is dependent on orderly and effective development of the public domain by private citizens, including utilization of the mineral resources thereon. The flow of money from productive mines supports large segments of the population and builds an essential tax base. The creation of such economy and tax base is impaired by Federal withdrawal of land from the public domain, and any proposals for the creation of "wilderness areas" is its very antithesis.

The council considers the objective of the general mining laws to be the discovery and development of the mineral resources of the public domain by private enterprise. To effect this objective, the laws invite citizens to prospect for minerals and, upon discovery, to locate valid mining claims. The mining laws also provide for protection of valid claims and the possessory rights thereunder prior to patent, and for transfer of legal title to private ownership by patent. History has proven the soundness of this system, and the council reaffirms its confidence in it.

The council holds that public lands are not the property of the Government of the United States, or of any of its agencies, but, instead, are lands held in trust for the people of the United States, and are destined for their eventual use under the principles of free enterprise. Vast areas of the West have in prospect many present and future uses, but these areas are most likely to find best use as a source of the national mineral wealth.

The continued inroads upon the use of this land which are made by Federal withdrawal of the land from mineral entry or by acquisition by various agencies of the Federal Government, have long been adverse to the economy of the West. Such inroads have been tremendously augmented in recent years. This has served to curtail seriously the productivity of private enterprise within the States, and to reduce State and Federal income, as well as the supply of materials for the defense of the country. Under present laws, no public-land State has the power effectively to resist such inroads.

Legislation, now pending in Congress, to regulate military withdrawals from the public domain accords with policies expressed here and previously by this council.

The mining industry recently has accepted the principle of multiple use of lands, as provided in Public Law 167, 83d Congress, and the various Federal agencies governing lands now withdrawn from mineral entry should reciprocate with policies permitting more ready development of minerals on such lands by private citizens than now is possible.

In general, the public lands problems of the miner remain much the same as in 1955. While the following recommendations differ in content and length from those of 1955, the council has no intention to abandon or to retract any of its previous recommendations.

The council recommends that—

(1) As to Federal land withdrawals:

(*a*) Continued attention by the Congress to both the withdrawal of public domain from mineral entry and other beneficial uses, for no matter what intended, and to the acquisition of western lands by the various agencies of the Federal Government.

(*b*) Congressional investigation, and appropriate legislation if found justified, of the possibility of extending to all forms of proposed withdrawals regulation similar to that expressed in legislation now before Congress regarding military withdrawals.

(*c*) Passage of Federal legislation permitting mineral entry to be made, with the consent of the Secretary of the Interior, and subject otherwise to the provisions of Public Law 167, on all land which has, or may be, withdrawn or acquired by Federal agencies, except upon national parks or monuments. (It should be noted that, while many of these withdrawn or acquired lands are now open to mineral development under lease from the Federal Government, the leasing system is preferential toward those most able to make high bids while the system of mineral entry by mining claim is more equitable and tends to encourage more prospecting activity).

(*d*) That the means of notification of the public by Federal agencies of the description and location of withdrawn land be improved, such as by prompt notice to county governments and to newspapers of adequate circulation in affected areas.

(*e*) That the Bureau of Land management be commended for its recent improvements in its hearings procedures.

(2) As to Oil and Gas Leasing Act: That the governors oppose any legislation proposals which would add any further classes of mineral lessees or any minerals or mineral deposits to those now named in the Oil and Gas Leasing Act.

(3) As to the Mineral Leasing Act:

That the same opposition, as cited under (2) above, be extended to the Minerals Leasing Act.

That the western governors urge the Department of the Interior to reappraise the maximum acreage limitations presently existing on the leasing of Federal mineral lands withdrawn from location and increase the acreage to meet the requirements of modern mining and refining needs. Illustrative of such need are the phosphate and the coal-mining industries.

It is the considered opinion of the council that no further restriction should be placed upon the noncompetitive lease rules and regulations and that such regulations should be so administered as to encourage the investment of venture capital.

(4) As to geophysical exploration: That the governors urge Congress to consider constructive changes in the general mining laws so as to afford a reasonable protection to exploration for deep or hidden deposits and where discovery can only be made following prolonged use of expensive equipment and modern scientific methods of prospecting.

(5) As to restrictive Federal legislation; and

(6) As to in-lieu lands; and

(7) As to State mining laws:

The council reiterates the statements and recommendations which it made at Sacramento, Calif., in November 1955.

MILITARY LAND WITHDRAWALS

For many years Government defense agencies have withdrawn vast areas of the public domain for military uses and have barred mining development on such areas.

The continued inroads upon the use of public domain which are made by Federal withdrawals for defense purposes, and the resulting curtailment of mining activity, have long been adverse to the economy of the West.

Accordingly, the council recommends that the governors of the Western States urge their respective delegations in the Congress of the United States to seek prompt passage of pending legislation which would limit public land withdrawals for defense purposes to no more than 5,000 acres, unless prior approval of Congress is obtained for larger withdrawals.

RESEARCH

The council recommends to the Governors serious consideration of the following discussed facts and conditions affecting industry research.

Research is the very foundation upon which growth of the mineral industries must depend. For the future health of the mineral industries and of the entire national economy, there should be vigorous research activity supported directly

by private industry as well as by State and Federal agencies, each working in the sphere for which it is best fitted; and

With respect to privately supported industrial research, economic factors should be such as to give maximum encouragement to industrial expenditures for research. This viewpoint is embodied in a recommendation on taxes, shared in by the research committee; and

Since many research projects involve financial commitments over a long period of years, the lack of a clearly stated national mineral policy has limited industry's willingness to undertake such long-term projects. It follows that the adoption of such a national policy, to which all these recommendations are devoted, will do much to encourage industrial research.

With respect to State and Federal research, the council recommends the following:

(1) Establish at Federal level, and at State level where desirable, permanent minerals research advisory boards. These boards should consider and recommend initiation of research programs which, in their opinion, are particularly needed.

(2) Encourage Federal and State mineral research programs at appropriate State agencies, universities, and nonprofit research foundations.

(3) Expand or establish in each of the mining States a clearinghouse or library of pertinent technical information and records dealing with all phases of the mineral industries.

The mineral industries of many of the Western States, particularly the small-mine operators, need some form of central clearinghouse for pertinent technical information which would be readily available in suitable form.

(4) Continue support of existing long-range research in Federal and State agencies.

Geologic and topographic mapping should be accelerated as an essential part of this long-range program.

TAXES

The continuance of a healthy and prosperous mining industry and the contributions it can and should make to the public revenue, to employment, to national security, and to the general welfare, depends upon maintaining production from now operating mines and the discovery and development of new deposits. Essential to this is the hope for profits commensurate with the difficulties, the effort, and the risks of losses involved. The inherent risks in mining cannot be avoided, and taxes should not be imposed in nature or amounts as will kill incentives for incurring these risks and will result in loss of Government revenues and harm to the domestic economy.

The council recommends that:

A. With respect to Federal income tax: Federal income taxes, which reach excessively high rates, should be substantially reduced. In addition:

1. As to depletion:

(*a*) Full and adequate allowance for percentage as well as cost depletion should be provided for all minerals on a fair and equitable basis, not less favorable than present rates. We particularly note the necessity of such allowances in the development of so-called oil shales in the Western States.

(*b*) Depletion should be recognized as an allowance to stockholders in determining the taxability of dividends they receive as well as being allowed to the corporation in determining its taxable income.

2. As to exploration costs: Costs of exploration, as well as development, should be allowed as a deduction without the limitations imposed by present law.

3. As to depreciation: The provisions for more reasonable depreciation contained in present law should be retained without fundamental changes. No amount should be considered as recovered by depreciation deductions which has not effectively reduced the taxpayer's income subject to tax.

4. As to operating loss: The more equitable allowance of net operating losses provided by present law should be maintained.

5. As to research expenditures: The allowance under present law as a deduction of expenditures on research and experimentation should be preserved.

6. As to double taxation of corporate earnings: The present allowances with respect to dividends received by stockholders are a small step to minimize double taxation of corporate dividends, which should be enlarged.

7. As to new mines: New mines should be exempted from income taxes for 3 years after commercial production begins.

8. As to capital gains: A further reduction of the rate on net long-term capital gains would be economically beneficial to the mining industry and, on the basis of past experience, would increase net revenue collected. The present capital gains tax on long-held assets is in reality a capital levy and is deplored.

B. With respect to State taxation: In State taxation, no particular tax nor the combined Federal, State, and local taxes should be such as to discourage the exploration and development or production of minerals. It is especially recommended that severance taxes, or taxes based on or measured by gross output, be avoided, since the taxload is heaviest on the small and marginal mine and those segments of the mining industry which are competing with foreign producers in essentially a free trade market.

Governor RUSSELL. May I state that for several years the governors of the 11 Western States have had set up an advisory mining group, sir, committees in their own States. These groups have worked very closely with the 11 western governors, and, in turn, for the past 2 years now, the western governors have met with the group, have passed resolutions that have emanated from the meeting with the mining group.

These resolutions, such as the one that I am about to read into the record, that was adopted at the western governors conference in Colorado Springs, Colo., on February 26 of this year, were passed unanimously by all of the western governors. Collectively, they are very seriously concerned with the low ebb in mining at the present time, with the importation of foreign ores and minerals.

We feel in the West that the domestic production is all-important to us.

These are the resolutions relating to metal and mineral mining adopted by the western governors at Colorado Springs, Colo.:

Whereas in the last 20 years the United States has changed from almost complete self-sufficiency in nonferrous metals to almost 50 percent dependence on foreign supplies; and

Whereas in the same 20 years tariffs have been reduced both by actual reduction of rates and by internal inflation of the currency by from 60 to 80 percent so that they are now almost universally below 10 percent ad valorem; and

Whereas during that period mining costs have risen to 3 to 4½ times the 1938 level while prices have risen only to 2 to 2½ times 1938 prices; and

Whereas the world mining industry has supplied all the metals and minerals for two wars and the United States Government stockpiles; and

Whereas those stockpiles are now filled and the productive capacity which supplied metals and minerals for those stockpiles is no longer needed; and

Whereas while much of this capacity was built in foreign countries with United States Government encouragement most of the portion which will have to close because of high costs lies within the United States; and

Whereas foreign metals and minerals now enjoy about one-half of the United States market and unless adequate steps are taken they will take over much of the remaining one-half now supplied by domestic producers; and

Whereas it is self-evident that domestic mining cannot long survive unless it is assured its fair share of the domestic market on a reasonably long-term basis; and

Whereas the internal economic health of most of the Western States is heavily dependent on the dollars brought into those States by the export of metals and minerals and those few Western States not so directly dependent on the mineral industry and directly affected by the economic health of the adjoining States who are more dependent on the industries; and

Whereas much of the tax income on which the Western State governments operate is derived directly or indirectly from the mineral industry; and

Whereas it is day by day becoming more apparent that in the event of another national emergency, no appreciable amounts of any metal or mineral will be available from overseas sources and if the Eastern States are to have metals for the manufacture of munitions and essential civilian requirements they must come from the West and from Canada and Mexico; and

Whereas should such an emergency result in the use of atomic weapons, the amounts of metals and minerals required for minimum reconstruction would be far beyond any currently available supply: Now, therefore, be it

Resolved, That the maintenance of a healthy metal and mineral mining industry in the Western States is of the utmost economic importance to those States both for themselves and as major markets for eastern manufacturers, as well as being of the utmost importance to the national security and such a healthy industry may best be maintained by:

1. Joint action by the Administration and the Interior and Insular Affairs Committees of both Houses and the Congress in adopting and implementing a national minerals policy without delay; and by

2. The Ways and Means Committee of the House of Representatives and the Senate Finance Committee taking all steps which may be needed to assure to the domestic mining industry at least one-half of the domestic market on the present proportion of the domestic market (whichever is higher) either by adequate tariffs, excise taxes, or quotas or allocation of import receipts or such combination as may be most suitable whenever an individual metal or mining industry has shown it can reach such levels.

More specifically it is recommended:

As to lead, zinc, tungsten, and mercury, the Tariff Commission take early and favorable action.

As to copper, lead, and zinc, the Congress approve pending industry legislation, and that the Tariff Commission approve applications for tariff relief now pending before that Commission.

As to cobalt, tungsten, mercury, fluorspar, columbium (and possibly manganese) the House Ways and Means Committee approve legislation providing sufficient import control to maintain adequate domestic levels of production.

As to antimony, chrome, asbestos (and possibly manganese), the House Ways and Means Committee to approve legislation allocating import receipts to maintain a minimum nucleus of production in these metals.

As to thorium, the Atomic Energy Commission either to provide a purchase program or release it from Government control and cease the purchase of foreign monazite at the expense of closing domestic mines.

As to uranium, the Atomic Energy Commission refrain from purchasing high-cost foreign production while limiting production domestically. We urge and request that action be taken to locate adequate purchasing depots and milling facilities sufficiently close to ore reserves and stockpiles in order to decrease the costs of transportation to producers and to the Government.

As to gold and silver, grant to United States citizens the same right to own gold as granted to foreign governments and an increase in the depletion rate from 15 to 23 percent.

I have two other resolutions that were passed by the same governors' conference, one on depletion allowance:

DEPLETION ALLOWANCE

Be it resolved by the western governors' conference, That, in the interest of national defense and the development of new resources within the borders of this country, the Congress of the United States is urged to grant to the synthetic fuel industry, based on oil shale, coal, tar sands, and other hydrocarbon-containing deposits, a reasonable depletion allowance for Federal income-tax purposes as the Congress shall determine.

Here is one from the copper industry:

Whereas a strong copper industry is important to national defense and domestic economy; and

Whereas the price of copper has dropped from 46 cents to 26 cents in the space of 1 year: Now, therefore, be it

Resolved, That the western governors' conference does endorse and urge the passage of legislation in the United States Congress establishing the import tax on copper at 4 cents per pound when the price of copper falls below 30 cents per pound.

Mr. Chairman, I have one other statement that I would like to read into the record. It is the resolutions that were adopted by the governors' mining advisory board of the State of Nevada.

May I state that in Nevada, as in the other States, I have a mining advisory board. We meet a number of times during the year and the mining situation is discussed, and, as a result of that, at the December meeting, the following resolutions were adopted by that board.

Senator BIBLE. This is December 1957?

Governor RUSSELL. This is December 20, 1957. Is there any objection to my reading that into the record?

Senator BIBLE. Proceed.

I think the past resolutions are very excellent resolutions.

Governor RUSSELL. Mr. Chairman, it is much easier to sit in my own office back in the State of Nevada than it is to appear before a Senate committee.

Senator BIBLE. You are doing very well.

Governor RUSSELL (reading):

Whereas mining is a basic industry important to the economy and welfare of our State, of the Nation, and to national defense: Be it

Resolved, That we favor a program which will support and encourage the exploration for, and development of, undeveloped domestic metal and mineral deposits; and, in line therewith; be it further

Resolved, That income-tax exemption be granted new undeveloped mining operations for a period of at least 3 years from the initiation of production, as an incentive to explore for and develop the mineral resources of our country.

Whereas domestic tungsten producers were induced to expand operations, and initiate new operation, in order to assure our country of an adequate supply of tungsten in case of national emergency; and

Whereas Public Law 733 provided for purchases of tungsten; and

Whereas the House of Representatives of the United States refused to appropriate money for such purpose, in spite of the fact that the Senate of the United States passed such an appropriation; and

Whereas tungsten purchases, totaling $179,230,000 were, and are, being made from foreign countries at prices of from $42 to $72, or more, per unit: Now, therefore, be it

Resolved, That the Federal Government be petitioned to keep faith with the tungsten producers, by purchasing all domestically produced inventories of tungsten accumulated prior to January 1, 1958, and to provide an adequate appropriation for additional purchases of tungsten in order than an industry, essential to national defense, not be permitted to die; and

Whereas Nevada, during the years 1954 and 1955, was the largest producer of tungsten in the United States: Now, therefore, be it

Resolved, That the Congress of the United States be petitioned for some remedial action to permit the survival of the tungsten industry.

Whereas due to excessive imports from low-cost production countries, the lead-zinc industry of the United States is threatened with extinction; and

Whereas all lead-zinc mines of Nevada have ceased operations, or greatly curtailed them; and

Whereas lead and zinc are essential to national defense, and lead-zinc mining is important and vital to several communitiess of our State: Be it

Resolved, That the Governor's Mining Advisory Board of the State of Nevada favors protection sufficient to perputuate a healthy lead-zinc mining industry.

Whereas the General Services Administration heretofore announced a purchase plan for quicksilver, providing for the acquisition of 125,000 flasks of do-

mestic quicksilver and 75,000 flasks of Mexican quicksilver at $225 per flask; and

Whereas that purchase program is about to expire and no quicksilver purchases will be made under that program subsequent to March 31, 1958; and

Whereas the program, after that date, provides for the purchase of only 30,000 flasks of domestic quicksilver; and

Whereas American producers are competing with the quicksilver producers of Spain, Italy, and Yugoslavia, where the cost of production is only a fraction of the production cost in the United States: Be it

Resolved, That adequate protection be afforded the quicksilver industry of the United States in order that the quicksilver industry of the United States may be permitted to survive, as quicksilver is a metal essential to our national defense.

Whereas the price of gold was established at $35 per ounce by Federal legislation in the year 1934; and

Whereas gold is the only domestic product relegated to a fixed and inflexible price; and

Whereas the United States Treasury sells gold to fabricators of metals and to foreign governments at the price paid producers of the metal: Now, therefore, be it

Resolved, That the Governor's Mining Advisory Board is opposed to the sale of gold, purchased by the United States Treasury from domestic producers, to fabricators of gold and to foreign countries; and

Whereas a return to the gold standard would, in our opinion, retard inflation: Be it

Resolved, in fairness to United States producers of gold, That all gold purchased by the Federal Government be earmarked and held inviolate as a backing for our currency and that gold purchased by the arts and trades, and by foreign governments, be purchsed in the open market and that gold, already acquired, or to be acquired, by the Treasury of the United States be held by the Treasury for monetary purposes only, in order that a return to the gold standard may be thereby expedited.

Whereas a concerted effort is being made by fabricators of silverware to repeal the Silver Purchase Act, providing for the purchase of newly mined silver at 90 cents per ounce; and

Whereas the purchase of newly mined silver by the Treasury Department is in no sense a subsidy to silver producers, as the United States Treasury makes a profit of 39 cents per ounce on each ounce of silver purchased, through seignorage; and

Whereas practically all of the silver produced in the United States is a by-product of lead-zinc mines; and

Whereas the depressed prices for lead and zinc have now reached the point where very little, if any, profit can be realized by domestic lead-zinc mines; and

Whereas any reduction in the price of silver would in no way affect the prices being charged by fabricators and purveyors of silverware, as is evidenced by the prices being charged for fabricated silver: Be it

Resolved, That we are opposed to repeal of the Silver Purchase Act, and that the Governor of the State of Nevada be requested, as the representative of the State, to present these resolutions before Congress.

Governor RUSSELL. Mr. Chairman, that concludes my presentation except to include in that a Senate Joint Resolution, No. 14, which was passed by the State Legislature of Nevada a year ago, memorializing the Congress of the United States to resume its responsibility of regulating foreign commerce, and to allow the 1934 Trade Agreements Act to expire in June 1958. May I file that for the record?

Senator BIBLE. This is a concurrent resolution? This is Senate Joint Resolution 14 of the Legislature of the State of Nevada?

Governor RUSSELL. Yes.

Senator BIBLE. That may likewise be incorporated in the record at this point.

(The resolution referred to follows:)

NEVADA SENATE JOINT RESOLUTION 14

Joint resolution memorializing the Congress of the United States to resume its responsibility of regulating foreign commerce, and to allow the 1934 Trade Agreements Act to expire in June 1958

Whereas the promotion of world trade should be on the basis of fair and reasonable competition and must be done within the principle long maintained that foreign products of underpaid foreign labor shall not be admitted to the country on terms which endanger the American workingmen's jobs or American investments; and

Whereas article I, section 6, of the Constitution of the United States, provides that the Congress shall have the power to lay and collect taxes, duties, imposts, and excises, and shall regulate foreign commerce; and

Whereas the Congress transferred the constitutional responsibility to regulate foreign trade to the executive branch through the 1934 Trade Agreements Act, as extended to June 1958, with authority to transfer such responsibility to Geneva under the general agreements on tariffs and trade: Now, therefore, be it

Resolved by the Senate and Assembly of the State of Nevada (jointly), That the United States Congress is hereby urged to resume its constitutional responsibilty of regulating foreign commerce and the national economy, through the adjustment of duties, imposts, and excises, through its agent, the Tariff Commission, and allow the 1934 Trade Agreements Act, which transferred such responsibility to the President, to expire in June 1958; and be it further

Resolved, That the secretary of state of the State of Nevada shall transmit copies of this resolution to each member of the Nevada congressional delegation.

Senator BIBLE. I want to commend you for your fine, thorough, and comprehensive statement.

I am very familiar with the April 1957, resolution of the western governors. It seems to me that it is a well-designed resolution. It is very embracing, and I think the entire group are to be commended, particularly for the unanimity which they have expressed in this resolution.

One of the real problems that we have in this mining industry is to be able to present a united front, and I think this resolution from 11 western governors does exactly that, and I think you pointed a way of some suggested legislation which, if enacted, would be of great help to the western mining industry and to the mining industry generally throughout the United States.

Governor RUSSELL. Mr. Chairman, you are absolutely right. Any time you can have 11 governors sit down and hold a discussion on any policy matter and you can have the unanimity of 11 men who will adopt a resolution of the type that was adopted, and stand solidly behind it shows the deep concern that the governors of the Western States have in not only the protection but also the building up of domestic mining production in this country; (1) as an economic factor, of course, for the individual States, and (2) as it affects the general economy of the Nation as a whole, and having the materials available in case of an emergency.

Senator BIBLE. Is it not true that in the State of Nevada many of your mining communities are practically wiped out?

Governor RUSSELL. At the present time that is true. Nevada probably has felt the recessed condition less than any of the other States except in the mining communities. We have one county, Lincoln County, where the mines are closed down. We have a serious problem there.

In White Pine County, due to the lowering of the price of copper, we have many men unemployed there at the present time, and have quite a critical condition as far as unemployment is concerned.

In the northern part of the State, the Winnemucca area has been affected, of course, by the low price of tungsten through there.

Not only that, but we think in terms of the unemployment and the economic results as far as the State is concerned, too, and, unless we can have a comprehensive long-range mineral policy program, then, in turn, we are not going to be able to go into the 110,000 square miles of the State of Nevada to develop other potential mine properties. We have to have a healthy minerals program in order to stimulate and to assure the development of additional mining.

I know there is a philosophy sometimes that if we can use up foreign ores we are saving ours, but that is not so. Conservation, to me, is twofold:

One, you can't take the best ore out of the mine and leave your marginal ore when the prices are low. If you have a price so that you can take it out and benefit in the use of not only your high grade but other ores, you are better off.

Then, two, exploration and stimulation of industry and bringing in potential new fields of mining can only happen when your price is such that you can utilize the domestic ores.

Senator BIBLE. Governor, I intend calling on the very able secretary of the Nevada Mining Association for his comments, as well as Mr. Stopper and Mr. Wagner, the secretary of the Chamber of Commrece of White Pine County.

I am going to ask Senator Malone and Senator Dworshak if they have any questions of the Governor. Then, in turn, I am going to ask that Delegate Bartlett be heard briefly. He has a brief presentation to make, and he must return to the House side. Then we will return to you gentlemen for such comments as you may have.

Senator Malone, do you have any questions?

Senator MALONE. Governor, I think you have made a very clear statement and more especially the position of the governors of the 11 Western States and their concern by virtue of the cheap labor imports of minerals.

Of course, the remedy has been much discussed for 20 years. We in Congress have been talking about remedies. In the 12 years I have been here there has been a remedy proposed for practically every mineral and every condition. Now we find textiles and machine tools and pottery and 500 other industries right on the brink, too, along with the mining industry.

So, if a general policy can be adopted or brought about that applies to all imports, chances are you will get a good deal of help.

This resolution passed by the Legislature of the State of Nevada was March 11, 1957.

Governor RUSSELL. May I explain that, Senator?

The Legislature in Nevada only meets every 2 years, and that was passed by the last legislative session of the State of Nevada.

Senator MALONE. Yes. Chances are very good if they were meeting now it would be even stronger, would it not?

Governor RUSSELL. I would say so, yes.

Senator MALONE. However, you have one paragraph there that is very informative, and that is that we just return to the Constitution

of the United States in the regulation of foreign trade. That is, let the Congress regulate it, as it says in article I, section 8. It simply says that the Congress fix duties, imposts, and excises, that we call tariffs, and that Congress regulate foreign trade, and that is in effect the resolution that you just put in the record.

Governor RUSSELL. That is true.

We hold in the State of Nevada, and concurring with the resolution passed by our State legislature, that that responsibility should return to the United States Congress.

Senator MALONE. I think that is very clear, and I would like, Mr. Chairman, to insert in the record at this point a resolution passed by 10 Western States at Salt Lake City on May 4, 1957, all of the Western States except Colorado, if it may appear in the record.

Senator BIBLE. Without objection, that will be the order.

(The resolution referred to follows:)

FOREIGN TRADE AND THE NATIONAL ECONOMY

Whereas 34 foreign, competitive nations are sitting in Geneva, Switzerland, regulating our foreign trade through multilateral trade agreements under the auspices of the General Agreement on Tariffs and Trade; and

Whereas this distribution of our foreign trade between such foreign competitive nations is being carried on under the 1934 Trade Agreements Act, as extended (so-called reciprocal trade); and

Whereas under this act more than $30 billion of American capital has been invested in such foreign low-wage standard of living nations to compete in American markets with American labor and investors in the textile, livestock, mining, crockery, glass, precision instrument machine tool, chemical and electrochemical, and several hundred other fields: Therefore, be it

Resolved, That the 10-State Republican regional conference, including the States of Arizona, California, Idaho, Montana, New Mexico, Nevada, Oregon, Utah, Washington, and Wyoming, urge the Congress to resume its constitutional responsibility of regulating foreign trade and the national economy through the adjustment of the duties, imposts, and excises (art. I, sec. 8) through its agent, the Tariff Commission, and allow the 1934 Trade Agreements Act to expire in June 1958.

Governor RUSSELL. May I point out that that was representatives from the States. That was not a governors' conference.

Senator MALONE. That is right. It was the representatives of the States, called by President Eisenhower, as one of the regional conferences.

Now, Mr. Chairman, I would like at this point to insert in the record a letter from the United States Tariff Commission showing exactly what would happen, and the procedure, providing the Congress does decide to the Constitution, article I, section 8, in the regulation of foreign trade, setting the duties, excises, and imposts that we call tariffs.

Governor, this letter, signed by Mr. Brossard, whom I consider one of the best Tariff Commission members we have ever had—and he is chairman now—shows that if the 1934 Trade Agreements Act is not renewed, as requested by this Nevada State Legislature, then 2 months after the President requests that, the multilateral trade agreements made in Geneva will be nonexistent or expire, but it seems after 6 months of such notice by the President to the parties to the bilateral agreements made by our Secretary of State, then those agreements would be nonexistent, so then all of the products that we have produced in the United States that have ever had a tariff—and you know about 60 percent of our imports in Nevada never have had a tariff, because

of various reasons, some not being commercially produced and some not necessary—would be back under the Constitution of the United States, article I, section 8, and the Tariff Commission, an agent of Congress, would regulate the foreign trade and adjust the duties, imposts, and excises.

As it now stands, with the President in full charge, no matter what the Tariff Commission does, he may or may not accept it, and Secretary Dulles testified before the Senate Finance Committee that he may trade to finance if he believes that it furthers foreign policy, and the General Agreements on Tariff and Trade regulated in Geneva is based on multilateral trade agreements.

They lower the tariffs on American products and on their own, but the gimmick there is that as long as they can show they are short of dollar balance payments they did not have to keep their agreements on trade.

So this letter, Mr. Chairman, shows exactly what happens if we do not extend the Trade Agreements Act, and I ask that it be inserted in the record at this point.

Senator BIBLE. Without objection, the letter will be inserted.

(The letter referred to follows:)

UNITED STATES TARIFF COMMISSION,
January 29, 1958.

HON. GEORGE W. MALONE,
United States Senate.

DEAR SENATOR MALONE: Reference is made to your telephone request to Mr. McCauley of our legal staff, on January 28, 1958, for a statement of the provisions of the several trade agreements to which the United States is a contracting party governing termination of such agreements. You are particularly interested in the procedures available for terminating our outstanding trade agreement concessions on petroleum and petroleum products so as to accomplish the reinstatement of the statutory rates of duty on such articles.

Subsection (b) of section 2 of the Trade Agreement Act of 1934, as amended, provides:

"Every foreign-trade agreement concluded pursuant to this Act shall be subject to termination, upon due notice to the foreign government concerned, at the end of not more than three years from the date on which the agreement comes into force, and, if not then terminated, shall be subject to termination thereafter upon not more than six months' notice."

All existing bilateral trade agreements to which the United States is a contracting party are now subject, in accordance with the terms thereof, to termination upon the expiration of 6 months after either the United States or the respective foreign country gives notice to the other party of its intention to terminate the agreement.

Any contracting party to the General Agreement on Tariffs and Trade (GATT) (including the United States), in accordance with the terms of the protocol of provisional application of the General Agreement on Tariffs and Trade, is free to withdraw from the agreement upon the expiration of 60 days after notice of such withdrawal is received by the Secretary General of the United Nations.

The United States could, under the above-mentioned procedures, eliminate all trade agreement obligations. In these circumstances, the statutory rates of duty (or, in certain instances, the rates established pursuant to sec. 336 of the Tariff Act of 1930) for the articles currently covered by trade agreement concessions would become effective. With respect to those articles covered in the GATT and not previously or presently covered in a bilateral agreement, the reinstatement of the effectiveness of the statutory rates of duty thereon could be accomplished solely by withdrawal from the GATT. With respect to those articles covered in the GATT, which are also covered in a bilateral agreement between the United States and a foreign country that is now a contracting party to the GATT, and the bilateral agreement has not been terminated, termination of the bilateral agreement in question, in addition to withdrawal from GATT,

would be necessary to bring about the effectiveness of the statutory rates. Finally, with respect to those articles covered only in a currently effective bilateral agreement, termination of the said agreement would be necessary for the reinstatement of the statutory rates of duty.

Petroleum, crude, fuel, or refined, and all distillates obtained from petroleum, including kerosene, benzine, naphtha, gasoline, pariffin, and paraffin oil, not specially provided for, are free of duty under paragraph 1733 of the Tariff Act of 1930. However, under the Internal Revenue Code of 1932, as amended, the following import taxes (duties) were provided for: Crude petroleum, one-half cent per gallon; fuel oil derived from petroleum, gas oil derived from petroleum, and all liquid derivatives of crude petroleum, except lubricating oil and gasoline and other motor fuel, one-half cent per gallon; gasoline or other motor fuel 2½ cents per gallon; lubricating oil, 4 cents per gallon; paraffin and other petroleum wax products, 1 cent per pound. These taxes were continued in the Internal Revenue Code of 1939.

In 1939, pursuant to concessions granted by the United States in the bilateral trade agreement with Venezuela, the rate of tax on crude petroleum and fuel oil derived from petroleum was reduced to one-fourth cent per gallon, applicable to imports of such products which were not in excess of 5 percent of the total quantity of crude petroleum processed in continental United States refineries during the preceding calendar year. All imports in excess of this amount remained subject to the one-half cent per gallon tax.

In 1943, in a bilateral trade agreement with Mexico, the 5 percent tariff rate quota was superseded by a concession tax rate of one-fourth cent per gallon on an unlimited quantity of imports of such articles. In addition, the tax on kerosene and liquid petroleum asphaltum, including cutbacks, and road oil was reduced to one-fourth cent per gallon pursuant to the Mexican agreement.

In the GATT (Geneva 1947), a concession was made as follows:

"Topped crude petroleum, fuel oil derived from petroleum including fuel oil known as gas oil, and all-liquid derivatives of crude petroleum (except lubricating oil and such derivatives specified hereinafter in any item 3422 [of the Internal Revenue Code]), one-fourth cent per gallon."

This GATT concession contains a proviso to the effect that in no event shall the import tax applicable to topped crude petroleum be less than the rate of tax applicable to crude petroleum.

The following rates of duty are also provided for in GATT: Mineral oil of medicinal grade, derived from petroleum, one-half cent per gallon; gasoline and other motor fuel, 1¼ cents per gallon; lubricating oil, 2 cents per gallon; and paraffin and other petroleum wax products one-half cent per pound.

Effective January 1, 1951, the bilateral trade agreement with Mexico was terminated. This resulted in (*a*) the reinstatement of the concessions granted in the bilateral trade agreement with Venezuela, with particular emphasis on the reestablishment of the 5 percent of domestic refinery output tariff rate quota, supra, and (*b*) the tariff rate quota becoming applicable to topped crude petroleum, in accordance with the proviso to the GATT concession, supra. This joint Venezuela-GATT arrangement remained in effect until late 1952.

In 1952, the President entered into a trade agreement supplementary to the 1939 agreement with Venezuela. Pursuant to this agreement (effective October 1952), the tariff rate quota on crude petroleum, fuel oil, gas oil, and topped crude petroleum was removed. In addition, the tax on these products testing under 25° (American Petroleum Institute) was further reduced to one-eighth cent per gallon. Also, the following GATT rates were granted to Venezuela: Gasoline or other motor fuel, 1¼ cents per gallon; lubricating oil, 2 cents per gallon; and paraffin and other petroleum wax products, one-half cent per pound.

The Internal Revenue Code of 1954 reenacted the taxes originally established by the 1932 Code, as amended, and continued in the 1939 Code, but such reenactment specifically preserved existing trade agreement rates.

In order to accomplish the reinstatement of the statutory rates of duty on these petroleum products by the "termination" process (as distinguished from elimination of the particular concession by such negotiating procedures as may be available), it would be necessary for the United States to withdraw from the GATT and to terminate the bilateral agreement with Venezuela. It should be noted that the termination of trade agreements would not, in all instances, result in higher duties. The higher-than-statutory rates of duty which have

been established pursuant to the trade agreements legislation (including those established under the "escape clause" procedure), would be superseded by the lower statutory rates.

Sincerely yours,

EDGAR B. BROSSARD, *Chairman.*

Senator MALONE. And also Section 336: Equalization of Costs of Production, of the Tariff Act of 1930, Public Law 361, which shows exactly to what you revert.

Senator BIBLE. Without objection, that portion of the act of 1930 will be inserted in the record.

(The material referred to follows:)

THE TARIFF ACT OF 1930

PUBLIC LAW 361

(Excerpts from sec. 336)

SEC. 336. EQUALIZATION OF COST OF PRODUCTION.

(a) CHANGE OF CLASSIFICATION OR DUTIES.—In order to put into a force and effect the policy of Congress by this Act intended, the Commission (1) upon request of the President, or (2) upon resolution of either or both Houses of Congress, or (3) upon its own motion, or (4) when in the judgment of the Commission there is good and sufficient reason therefor, upon application of any interested party, shall investigate the differences in the costs of production of any domestic article and of any like or similar foreign article. In the course of the investigation the Commisison shall hold hearings and give reasonable public notice thereof, and shall afford reasonable opportunity for parties interested to be present, to produce evidence, and to be heard at such hearings. The Commission is authorized to adopt such reasonable procedure and rules and regulations as it deems necessary to excute its functions under this section. The Commisison shall report to the President the results of the investigation and its findings with respect to such differences in costs of production. If the Commission finds it shown by the investigation that the duties expressly fixed by statute do not equalize the differences in the cost of production of the domestic article and the like or similar foreign article when produced in the principal competing country, the Commisison shall specify in its report such increases or decreases in rates of duty expressly fixed by statute (including any necessary change in classification) as it finds shown by the investigation to be necessary to equalize such differences. In no case shall the total increase or decrease of such rates of duty exceed 50 per centum of the rates expressly fixed by statute.

(b) CHANGE TO AMERICAN SELLING PRICE.—If the Commission finds upon any such investigation that such differences can not be equalized by proceeding as hereinbefore provided, it shall so state in its report to the President and shall specify therein such ad valorem rates of duty based upon the American selling price (as defined in sec. 402 (g)) of the domestic article, as it finds shown by the investigation to be necessary to equalize such differences. In no case shall the total decrease of such rates of duty exceed 50 per centum of the rates expressly fixed by statute, and no such rate shall be increased.

(c) PROCLAMATION BY THE PRESIDENT.—The President shall by proclamation approve the rates of duty and changes in classification and in basis of the value specified in any report of the Commission under this section, if in his judgment such rates of duty and changes are shown by such investigation of the Commission to be necessary to equalize such differences in costs of production.

(d) EFFECTIVE DATE OF RATES AND CHANGES.—Commencing thirty days after the date of any Presidential proclamation of approval the increased or decreased rates of duty and changes in classification or in basis of value specified in the report of the Commission shall take effect.

(e) ASCERTAINMENT OF DIFFERENCES IN COSTS OF PRODUCTION.—In ascertaining under this section the differences in costs of production, the Commission shall take into consideration, insofar as it finds it practicable:

(1) IN THE CASE OF A DOMESTIC ARTICLE.—(A) The cost of production as hereinafter in this section defined; (B) transportation costs and other costs incident to delivery to the principal market or markets of the United States for the article; and (C) other relevant factors that constitute an advantage or disadvantage in competition.

(2) IN THE CASE OF A FOREIGN ARTICLE.—(A) The cost of production as hereinafter in this section defined, or, if the Commission finds that such cost is not readily ascertainable, the Commission may accept as evidence thereof, or as supplemental thereto, the weighted average of the invoice prices or values for a representative period and/or the average wholesale selling price for a representative period (which price shall be that at which the article is freely offered for sale to all purchasers in the principal market or markets of the principal competing country or countries in the ordinary course of trade and in the usual wholesale quantities in such market or markets); (B) transportation costs and other costs incident to delivery to the principal market or markets of the United States for the article; (C) other relevant factors that constitute an advantage or disadvantages in competition, including advantage granted to the foreign producers by a government, person, partnership, corporation, or association in a foreign country. * * *

Senator MALONE. The Governor of Nevada came to Washington, and 3,000 miles is quite a long way to come, but it is worth it, and, Governor, you represent the entire area west of the Rocky Mountains, and they have had little attention in the last 20 years.

Thank you again for making the trip.

Governor RUSSELL. Senator Malone made one statement which is so true, and that is that oil, textiles, plywood, tuna, and wool are somewhat in the same position, and they probably need as much help as some of the minerals.

Senator BIBLE. Thank you, Governor Russell.

Senator MALONE. May I insert one more statement?

Senator BIBLE. Yes, sir.

Senator MALONE. We are in the tungsten business and in the mineral business generally in the West, and, as a matter of fact, the United States is. The North Atlantic is one of the chief producers of tungsten.

Public Law 206 of the 83d Congress that was passed in 1953 called then the Malone-Aspinall Act fixed the price on seven minerals, including tungsten, up above the world price, so it was thought it would make up the difference in the labor cost, taxes, and the cost of doing business here, and the chief competing country.

It was under that act, was it not, that we were trying to encourage the producer of tungsten?

Governor RUSSELL. Yes, sir.

Senator MALONE. And that act is still good until 1959.

The Senate appropriated the money and the House turned it down.

Thank you. And I would like to put into the record at this time Public Law 206.

Senator BIBLE. Public Law 206 of the 83d Congress, 1st session, will be made a part of the record at this point.

(Public Law 206 is as follows:)

[PUBLIC LAW 206—83D CONGRESS]

[CHAPTER 339—1ST SESSION]

[H. R. 2824]

AN ACT

To encourage the discovery, development, and production of tungsten, manganese, chromite, mica, asbestos, beryl, and columbium-tantalum-bearing ores and concentrates in the United States, its Territories, and possessions, and for other purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Domestic Minerals Program Extension Act of 1953".

DECLARATION OF POLICY

SEC. 2. It is hereby recognized that the continued dependence on overseas sources of supply for strategic or critical minerals and metals during periods of threatening world conflict or of political instability within those nations controlling the sources of supply of such materials gravely endangers the present and future economy and security of the United States. It is therefore declared to be the policy of the Congress that each department and agency of the Federal Government charged with responsibilities concerning the discovery, development, production, and acquisition of strategic or critical minerals and metals shall undertake to decrease further and to eliminate where possible the dependency of the United States on overseas sources of supply of each such material.

SEC. 3. In accordance with the declaration of policy set forth in section 2 of this Act, the termination dates of all purchase programs designed to stimulate the domestic production of tungsten, manganese, chromite, mica, asbestos, beryl, and columbium-tantalum-bearing ores and concentrates and established by regulations issued pursuant to the Defense Production Act of 1950, as amended, shall be extended an additional two years: *Provided*, That this section is not intended and shall not be construed to limit or restrict the regulatory agencies from extending the termination dates of these programs beyond the two-year extension periods provided by this section or from increasing the quantity of materials that may be delivered and accepted under these programs as permitted by existing statutory authority: *Provided further*, That the extended termination date provided by this section for the columbium-tantalum purchase program shall not apply to the purchase of columbium-tantalum-bearing ores and concentrates of foreign origin.

SEC. 4. In order that those persons who produce or who plan to produce under purchase programs established pursuant to Public Law 774 (Eighty-first Congress) and Public Law 96 (Eighty-second Congress) may be in position to plan their investment and production with due regard to requirements, the responsible agencies controlling such purchase programs are directed to publish at the end of each calendar quarter the amounts of each of the ores and concentrates referred to in section 3 purchased in that quarter and the total amounts of each which have been purchased under the program.

Approved August 7, 1953.

Senator BIBLE. Senator Dworshak?

Senator DWORSHAK. I have a few questions. Thank you, Mr. Chairman.

Governor Russell, I want to commend you as the representative of the western governors for your splendid presentation.

I have been aware for sometime of the profound concern of the governors in meeting some of the issues involved in the depressed mining industry in this country.

You have had several conferences. You have had representatives from the State of Idaho and all of the States participating in the deliberations and making recommendations to the governors, and I think that you have rendered very fine service in trying to assist the Congress and the administration in solving some of the mining problems.

I was impressed by your comments that the conference believes that there should be implementation of a national minerals policy without delay. We have been awaiting some implementation for about 4 or 5 years now to take the place of stockpiling.

You also suggest in your resolutions that some steps should be taken to assure the domestic mining industry at least one-half of the domestic market. I am in complete accord with that objective.

I want to recall the report submitted by the Paley Commission about 5 years ago which essentially said that we had become a have-not nation or country, and that we would become more and more dependent upon foreign sources of strategic materials and that policy was followed for some time.

I recall that I was one of a few who protested and objected to that report, because, while I am not a mining man, I was quite sure that if some incentive might be given the domestic mining industry we could take care of a large share of our requirements.

What I want to point out to you and then ask for your comments is this: that we have uncovered these deposits, and the administration has done quite a lot in helping to explore and develop these deposits, but whenever anything is done like in the case of tungsten, where there becomes available a large potential production, we must remember the mining cannot be done profitably unless there is some assistance of some kind because of the cost of production and the competitive situation we make it almost impossible for our American mining industry to survive.

It seems to me that we can set up these objectives. As the chairman pointed out, we have this unanimity. We know what we want to accomplish, and yet very little, if anything, has been done to reach that goal.

I am asking you how we can accomplish this.

You say, well, tariffs, quotas.

Quotas are frowned upon. Tariffs are to a certain extent. We do not want to offend foreign nations because they can produce these minerals more cheaply than we can and sell them in this country, and they think they have the right to export their minerals into the United States.

We have our stockpiling. We believe that we have adequate supplies of these strategic minerals to take care of our needs in case of another global war or some emergency, but how can we meet this differential in the cost of producing minerals?

I am not going to go into details, but you know as well as I do that while miners receive fine wages in this country commensurate with our standard of living, abroad the wage scales are very low and the deposits are rich.

How can we overcome that? What must be done to put the United States back into the minerals production industry?

Governor RUSSELL. Personally, I feel that sometimes if metal prices go too high, then you bring into production somewhat marginal products that add to the overall and they suffer the quickest when the prices go lower.

I think if we could have a tariff on the different metals that would stabilize, say, copper, at probably 30 cents, and tungsten, $40 and $45 per unit, as two examples, then, in turn, we could keep our production

going, and if prices didn't go too high, we don't stimulate some of these other properties that cause the trouble we have now.

I can give an example of one producer in the State of Nevada who assured us that under the tungsten price, of course he had a property there that would go on for years. In fact, we built a secondary road into the property. That property is being entirely abandoned now, and he is going to South America where he can pay 75 cents a day for labor.

The statement has been made that compared to many countries of the world, everyone in the United States is a capitalist because they have a car, refrigerator, washing machine and so on. If we are to maintain such standard of living, then, in turn, we have to have the protection because apparently in the other parts of the world the standard of living is not coming up to that of the American way of life.

Senator DWORSHAK. Governor, tariffs, of course, offer some solution, but you know that there is no partisanship or politics involved in the tariff because for a quarter of a century, at least since we have had this Trade Agreements Act, both parties have overwhelmingly opposed tariffs primarily because the State Department is motivated by the primary desire to promote the welfare of people in every foreign country, and while that may deserve commendation, we seem to overlook the needs of providing for the welfare of our own mine operators and miners, and I think that, as a realist, there is little possibility of getting adequate tariffs of any kind.

I should not mention this, but it was only a few years ago on one occasion when the Trade Agreements Act was extended in the United States Senate there were only two lone Senators who opposed it, your Senator from Nevada, and myself, and they threatened to put us over in the museum at that time, and probably that is where we should have been placed. But since that time we have won many converts because many industries other than mining have been affected adversely by these imports from many countries.

I do not know how we are going to get adequate tariffs imposed.

Of course, the other is import quotas, and that is that you import the differential between your domestic production and your domestic consumption.

I realize that this problem has been going on for a long time, but I also realize too that probably for the first time we face it not only on minerals and metals but we also face it on such things as the tuna that is coming in from the Far East.

The oil industry recently held meetings here in Washington on that, and the same thing with wool. There are many things now, textiles, for example. Many things that are facing the same condition, so that, nationally to protect those, some overall general policy will have to result.

When you talk in terms of shutting down, let's take them all in together then. The purchasing power of the number of men that are employed under normal conditions results in the purchasing of everything. Many of your appliance people are hollering now, and your car people are hollering. It comes right back down to the fact that in producing raw materials you are producing new wealth. That money flows into the country. It expands. It reaches every segment

of the United States as far as purchasing power is concerned. The State Department is not aware of that.

Governor RUSSELL. I am not an isolationist, frankly, and I realize that we have to have a certain amount of world trade.

Senator DWORSHAK. Do you think it is reasonable, though, to request that half of the minerals that are consumed in this country be reserved for our domestic producers?

Governor RUSSELL. I do, and also that more consideration be given to our raw material field which embraces metals, oils and such things as lumber and tuna and so on.

Senator DWORSHAK. The oil industry is complaining now and protesting due to the imports of oil which are depressing that industry.

Governor RUSSELL. That is true.

My philosophy is the same as it was when I served with my good friend Senator Barrett in Congress a number of years ago and we faced somewhat the same conditions then. And then, of course, the pipelines were filled, and now we are back in a little bit worse situation than we were at that period.

Senator DWORSHAK. That is the point I wanted to stress, that for a quarter of a century we have been facing this situation. We have been unanimously observing that the trends were adverse to the welfare and the security of the United States, and that we must implement a long-range minerals program.

But again I say we have done nothing. We have stockpiled some minerals, but that is not a long-range minerals program. So I am merely pointing out, and I do say it with awareness, that there is the joint responsibility on the part of the Congress as well as the administration in trying to solve this problem.

But the record shows that for a quarter of a century we have been going down, down, downhill and that nothing has been done to solve this basic problem.

Governor RUSSELL. Senator, I wouldn't be here if we were satisfied.

Senator BIBLE. Thank you very much, Senator Dworshak.

Senator Barrett?

Senator BARRETT. Thank you, Mr. Chairman.

At the outset let me congratulate my good friend, Governor Russell of Nevada. I had the pleasure of serving with him in the House a number of years ago, and I enjoyed that opportunity immensely.

I watched your career as Governor of Nevada, and I am very happy that you have been able to do such a creditable job for the people of your State.

I confess that I hardly know just how we can approach a solution of this problem.

Let me make this observation: I had legislation drafted and introduced 14 years ago in the House, trying to arrive at a measure of relief for the wool growers of this country, a quota bill which was wholly unsatisfactory to the State Department, and is today.

So it is just a very simple problem, the way I see it.

No. 1, every other nation on earth acts in self-interest. We take the directly opposite position, that it is our responsibility to look out after the rest of the world and forget our own country.

About 10 or 12 years ago the automobile industry was a very strong adherent to the proposition that we ought to have free trade and we ought to encourage outside manufacturers to produce goods and bring them into this country in competition with our own people.

That is coming home to roost today, and you will find a lot of foreign-made automobiles all over the country. As a matter of fact, a good friend of mine was going to Europe a while back, and he asked me to write a letter to the Volkswagen people recommending him for an agency in Wyoming.

I said, "I don't think I would ever be caught doing anything like that."

And I would not do it, and, of course, I did not.

However, no doubt they are getting a reasonably fair share anyway of the automobiles in this country.

I do not know of any reason why they could not capture all of the business in this country with the fact that they have skilled artisans and mechanics in these European countries just as good as ours here, and fellows who work for about a third as much as ours, and they can produce the goods and pay any duties that might be imposed on their importation into this country.

In the last 10 years about 158 textile mills have closed in this country. We have helped out Japan by giving them the money to install machinery that is just as high class as anything we have in this country. Those Japanese are pretty good workmen, and they can put out the goods. They get about a 13th of the wages that our people get in this country. There is not any reason under the sun why they could not produce and deliver in this country goods at a fraction of what it costs our people to do it, and that is the reason that these mills are closed.

It seems to me that it is high time the American people become alerted to the situation.

The fact of the matter is labor has been very vociferous in is praise of the Reciprocal Trade Agreements Act in the way it is operated, and now they are finding that they are the very people that are being prejudiced by it, and it is not only the miners and the textile workers, but I could go through the list and enumerate nearly every industry, and I do not know of any industry in this country that could stand up under competition from these low-cost producing countries.

I have not supported this policy for a long time, and do not intend to.

I think that, sure, we have to do our fair share for the world, but we have to look out after our country, too. We are not doing a very good job in that regard.

I have read Governor Knight's letter about gold. If I understand the situation correctly, we have lost the right to control the price of gold. We could not raise the price of gold now if we wanted to without the consent of all of these countries in the Breton Woods Agreement that we approved when you and I were over in the House, I believe—not with our votes, however.

There is only 1 of 2 things that can be done. Either we have to compensate for the difference between the cost of production abroad and here at home, or these people abroad have to raise their living conditions up to ours, and if they are on a par we can compete with them. But, if not, we just cannot do it.

To get a tariff through that will be effective would be a terrific job, and it would be so high that I do not know how much support we could get for it. To put in a tariff on any commodity would just take a terrific tariff.

I think perhaps we ought to have a combination of import quotas and tariffs and try to work out something, but it seems to me that we better come up with a long-range program, as Senator Dworshak says, and at least tell the whole world that we want two-thirds or three-fourths of our own markets here at home and we are ready to give away the rest of it to the balance of the world. But we have to live, too. That is the whole thing.

If you have any ideas as to how to work this thing out, I would certainly like to know them, and I think something has to be done, and done quickly.

I think that the Sugar Act has done a fairly creditable job, as far as the sugar-beet people and sugarcane people of this country are concerned. The Wool Act has operated in a way that it helps the woolgrowers. And, in the absence of a quota system or an adequate tariff, that is the only other recourse that I know of for the wool industry.

While we have protected the woolgrowers, we have not protected our own customers, the textile people in this country. So, even though we have protection for the woolgrowers, we find ourselves in the position where we do not have any customers. The textile mills are abroad. They are the fellows that are manufacturing the goods, and we cannot sell to them. So we are in a bad fix there.

That just proves one thing: we have to have an overall program in this country that will take care of our mining industry and our automobile industry, and our textile industry, and the watch industry, and all these others that went down the drain.

Governor RUSSELL. And stop-gap measures that we have tried to pass have not proven successful.

Senator BARRETT. What we need is a long-range program. I think we have to face up to it, and I think we have to come up with some proposal that will meet with some support in the country.

They have been able to sell the American people on the idea that there is something intrinsically wrong with the tariff. But I believe we could sell the people on the idea that the laboring people in America and the business people of America are entitled to a fair break to get, say, a little better than half of our own markets anyway.

Senator BIBLE. Thank you, Senator Barrett. Do you have any further questions?

Senator MALONE. I think what Senator Barrett has said makes a lot of sense. He talked about automobiles. It costs 55 percent of an American automobile cost to get it into England.

No one is embarrassed but us by having a high tariff or tax. That is to prevent their import. In some of these nations a Cadillac costs $20,000, the ones we are trying to help.

I just want to point out for the record that the Governor is here and has made a long trip to try to help us.

The Constitution of the United States provides the powers that gave the legislative branch the regulation of the economy, the regulation of foreign trade, which really means the economy, and adjustment of the duties, imposts, and excises that we call the tariffs.

In the executive department we put the power of the fixing of foreign policy. They deliberately separated the two powers. The 1934 Trade Agreements Act tied the two together so the Executive regulates the economy and regulates the tariffs exactly, and he fixes foreign policy and can trade one for the other.

That was prohibited in the Constitution, and then tied together again by the Congress of the United States.

Senator BIBLE. Thank you, Governor Russell.

Mr. REDWINE. Mr. Chairman, at this time I would like permission to insert in the record several statements and letters addressed to Senator Murray from western governors.

Senator BIBLE. Without objection, that will be done.

(The communications are as follows:)

STATEMENT BY GOV. STEVE MCNICHOLS, OF COLORADO, ON THE NEED FOR A LONG-RANGE MINERALS POLICY

Gentlemen, I am privileged to have the opportunity to present for the consideration of your committee certain comments and suggestions relating to the need to establish a national long-range policy for the minerals industry. I regret that circumstances have prevented my appearing before you in person during your scheduled hearings on this vital and significant problem.

It is fortunate for the welfare of the Western States and for the mining industry that your committee is now directing its attention to the development of a long-range minerals policy for the Nation. Far more competent technical testimony than mine has recognized, I am sure, that lack of a firm and permanent minerals policy has proved to be a constant threat to the economy of the Western States, whose wealth is so considerably measured by natural resources. In addition to this major effect on our several local economies, our Nation now faces new challenges in our national security, which demand that we determine and accept a policy for minerals not only assuring this Nation but also our allies of a sound and conservative use and development program which will protect our resource supply for our security and our future.

The western governors have again and again recognized this problem. In their 1958 western governors' conference, following lengthy discussion, they resolved their recommendations as follows:

"Whereas in the last 20 years the United States has changed from almost complete self sufficiency in nonferrous metals to almost 50 percent dependence on foreign supplies; and

"Whereas in the same 20 years tariffs have been reduced both by actually reduction of rates and by internal inflation of the currency from 60 to 80 percent so that they are now almost universally below 10 percent ad valorem; and

"Whereas during that period mining costs have risen to 3 to 4½ times the 1938 level while prices have risen only to 2 to 2½ times 1938 prices; and

"Whereas the world mining industry has supplied all the metals and minerals for two wars and the United States Government stockpiles; and

"Whereas those stockpiles are now filled and the productive capacity which supplied metals and minerals for those stockpiles is no longer needed; and

"Whereas while much of this capacity was built in foreign countries with United States Government encouragement most of the portion which will have to close because of high costs lies within the United States; and

"Whereas foreign metals and minerals now enjoy about one-half of the United States market and unless adequate steps are taken they will take over much of the remaining one-half now supplied by domestic producers; and

"Whereas it is self-evident that domestic mining cannot long survive unless it is assured its fair share of the domestic market on a reasonably long-term basis; and

"Whereas the internal economic health of most of the Western States is heavily dependent on the dollars brought into those States by the export of metals and minerals and those few Western States not so directly dependent on the mineral industry and directly affected by the economic health of the adjoining States who are more dependent on the industries; and

"Whereas much of the tax income on which the Western State governments operate is derived directly or indirectly from the mineral industry; and

"Whereas it is day by day becoming more apparent that in the event of another national emergency, no appreciable amounts of any metal or mineral will be available from overseas sources and if the Eastern States are to have metals for the manufacture of munitions and essential civilian requirements they must come from the West and from Canada and Mexico; and

"Whereas should such an emergency result in the use of atomic weapons, the amounts of metals and minerals required for minimum reconstruction would be far beyond any currently available supply: Now, therefore, be it

"*Resolved*, That the maintenance of a healthy metal and mineral mining industry in the Western States is of the utmost economic importance to those States both for themselves and as major markets for eastern manufacturers, as well as being of the utmost importance to the national security and such a healthy industry may best be maintained by:

"1. Joint action by the administration and the Interior and Insular Affairs Committees of both Houses and the Congress in adopting and implementing a national minerals policy without delay; and by

"2. The Ways and Means Committee of the House of Representatives and the Senate Finance Committee taking all steps which may be needed to assure to the domestic mining industry at least one-half of the domestic market on the present proportion of the domestic market (whichever is higher) either by adequate tariffs, excise taxes, or quotas or allocation of import receipts or such combination as may be most suitable whenever an individual metal or mining industry has shown it can reach such levels.

"More specifically, it is recommended—

"As to lead, zinc, tungsten, and mercury, the Tariff Commission take early and favorable action.

"As to copper, lead, and zinc, the Congress approve pending industry legislation, and that the United States Tariff Commission approve applications for tariff relief now pending before that Commission.

"As to cobalt, tungsten, mercury, fluorspar, columbium (and possibly manganese) the House Ways and Means Committee approve legislation providing sufficient import control to maintain present domestic levels of production.

"As to antimony, chrome, asbestos (and possibly manganese), the House Ways and Means Committee to approve legislation allocating import receipts to maintain a minimum nucleus of production in these metals.

"As to thorium, the Atomic Energy Commission either to provide a purchase program or release it from Government control and cease the purchase of foreign monozite at the expense of closing domestic mines.

"As to uranium, the Atomic Energy Commission refrain from purchasing high-cost foreign production while limiting production domestically. We urge and request that immediate action be taken to provide adequate purchasing depots and milling facilities located sufficiently close to ore reserves and stockpiles in order that excessive transportation now paid by the Government and the producers may be obviated.

"As to gold and silver, grant to United States citizens the same right to own gold as granted to foreign governments and an increase in the depletion rate from 15 to 23 percent."

Certainly the effect on the economies of the 11 Western States in terms of their domestic employment problems has been material. Unemployment in the mining industry has doubled in Colorado between February 1957 and January 1958. In addition, in the short period between January 1958 and February 1958 unemployment again doubled, which can give you only a partial picture of the tremendous significance to our State's economy of the hit or miss minerals policy which seems to have characterized our national mineral and procurement and production program.

This tremendous economic impact on our local governments can perhaps be further spelled out in terms of Colorado's mining industry, which during the years 1947 to 1952 had an average of 153 lead, silver, and zinc mines in operation. Between 1953 and 1958 these declined to an average of 98 operating mines in Colorado. As of today, Colorado has only four major mining operations going in the State.

More specifically, employment in the mining industry has declined in Colorado from 767 in February of 1957 to 1,514 in January of 1958 to a present unemployment of 3,073 in February of 1958. (This is not total unemployed, but rather the distribution of weeks as compensated by industry for unemployment.)

In consideration of this total problem, it is clear that several possible solutions exist. For a considerable length of time a school of thought in the minerals industry has recommended the adoption of high protective tariffs to insure an offset against foreign low-cost labor competition. Such a protectionist philosophy is in direct opposition to the Congress' present consideration of the renewal of the reciprocal trade program. As a reciprocal to this possibility recommendations have been voiced for dropping the wage level in the domestic minerals below the standards of the rest of the domestic economy. This is clearly not only impossible, but only a device to permit an unrealistic competition of the domestic minerals industry with the foreign minerals industry.

A third argument has been to abandon the domestic minerals market to foreign producers, thereby closing down our domestic mining industry. On the basis of the present stockpiling philosophy and the resultant rates of mining, it has become clear that we have nearly closed the industry in spite of the stockpiling program.

The abandonment of the domestic mining market to foreign producers would seem to be a position advocated by free-trade theorists. And certainly while this philosophy would be runious to the economy of Colorado and to the economies of the 11 Western mining States, it would have a material and deleterious effect on the economy of the Nation as a whole. The rate of unemployment which is now indicated by the mining industry not only in Colorado, but throughout the Nation, makes it clear that it would be economically disastrous to abandon the domestic mining industry to its foreign competition. On the grounds of national security alone it is clear that our national safety depends to a very material degree on the maintenance of the sound use of its conservation program in the development of our resources and the establishment of a technique in a long-range carefully integrated minerals policy for maintaining that resource production program.

A solution which lies partly between the strong protectionist philosophy of the high tariff program and the free-trade philosophy which would abandon the domestic minerals industry appears in the quota system now in effect for the sugar industry.

Under such a quota system, it is possible to assign a degree of economic significance to each segment and facet of the minerals industry and to produce to attain and maintain that level of production and that level of stockpiling of resources.

In establishing such a philosophy of quotas for the minerals industry, the committee should not overlook the necessity for the adoption of a widespread investigation program in the field of research. The history of the aluminum industry offers an excellent example of the effect of competent research upon the position of a single segment of the minerals industry in finding new expanded uses for this metal which have created new and expanded markets.

The entire history of mining and milling in the United States has been a history of great economic peaks and valleys which have, in turn, been related to fantastically expensive emergency crash programs dictated by either shifts in the total domestic economy and more frequently by the requirements of a nation at war. Perhaps this has been better expressed in the 1954 report of the President's Cabinet Committee on Minerals Policy which states in part "Successful mining usually requires long-range planning and substantial investment. Today's mines are the result of exploration, development, and risk-taking over a period of many years. Exploration for mineral deposits often requires substantial venture capital. Much of it a total loss. Mines of the future must be planned today, not a decade hence."

Perhaps in conclusion I can do no more than to quote this significant statement on minerals policy by the President's Cabinet Committee of 1954. It is clear that in times of war a tremendous national effort has been devoted to the crash development of new sources and required needs in the minerals program. How much more intelligent, how much more closely related to a sound national security program would be a policy requiring a continuous inquiry into sources of mineral deposits and techniques for minerals extraction.

I wish to thank the committee for this opportunity to present a statement before it.

STATE OF MINNESOTA,
St. Paul, April 11, 1958.

Hon. JAMES E. MURRAY,
Chairman, Subcommittee on Minerals, Materials, and Fuels, Committee on Interior and Insular Affairs, Senate Office Building, Washington, D. C.

DEAR SENATOR MURRAY: As undoubtedly you and members of your subcommittee realize, the State of Minnesota now affords our country a unique opportunity to prove in the field of manganese that our steel industry may at least become somewhat independent of foreign imports of manganese. For many years, our Government has sought to develop a method of extracting manganese from low-grade domestic ores. Countless millions of dollars have been spent in this field.

Manganese Chemicals Corp., a Minnesota corporation, with a plant located at Riverton, Minn., on the Cuyuna Range, has now proved, on a production basis, that the virtually limitless low-grade Cuyuna Range manganese ores can be utilized in competition with foreign ores. The present plant is small in terms of capacity to supply the steel industry. If a large plant were built, it appears that manganese for our steel industry can be produced from Minnesota's low-grade ores at a price competitive, at current prices, with foreign ores.

I urge that Congress do everything possible to assist the development of a manganese industry in Minnesota. Such congressional support at this time will establish without question justification of our Government's long-standing domestic manganese program, relieve our steel industry of critical dependence on foreign ores, and do much to alleviate serious unemployment in northern Minnesota.

Manganese Chemicals Corp. has submitted to you a letter dated April 8, 1958, and has attached to that letter a proposal currently under consideration by the Office of Defense Mobilization. I ask that this letter of mine, together with the letter from Manganese Chemicals Corp. and its current proposal to the Office of Defense Mobilization, be made a part of the record of hearings now being conducted before your subcommittee.

Sincerely yours,

ORVILLE L. FREEMAN, *Governor.*

UTAH MINING ASSOCIATION,
Salt Lake City, Utah, March 26, 1958.

Hon. JAMES MURRAY,
Chairman, Senate Interior and Insular Affairs Committee, Senate Office Building, Washington, D. C.

SENATOR MURRAY: I regret that it is not possible for me to attend the hearings on long-range mineral policy being conducted by your committee. However, acceptance of this statement, on conditions prevailing in the mining industry for the record of those hearings, would be greatly appreciated.

Between excessive imports, drastically lowered import duties, depressed prices, greatly increased costs and an almost complete lack of national mineral policy to maintain an adequate mobilization base, the mineral industry has for a number of years past suffered a series of reverses. Those reverses, through attrition, have eliminated some phases of the industry, have pushed others to the brink of survival and have at this date included in a distress category the entire nonferrous portion of domestic mining.

A brief recounting of present conditions in Utah will serve to illustrate need of an effective national mineral policy if this situation is to be corrected.

The Salt Lake tungsten refinery, built in 1953 to treat tungsten ore mined in the Mountain States area, closed January 15, 1958, for lack of domestic ore. Some 100 employees were dismissed, and investors in the capital equipment were left high and dry in regard to return of their investment. Your committee has reviewed in great detail the bungling of the domestic tungsten program and the favor shown foreign producers, and there is therefore no need for me to indulge in a recount of those facts and conditions.

Fluorspar operators in Utah produced 18,000 tons of metallurgical grade in 1950, but were forced down to 10,582 tons in 1956 because of excessive imports of foreign fluorspar, principally from northern Mexico. A small measure of relief through stockpiling boosted production to 13,000 tons in 1957.

Copper production has been reduced by 21 percent since late in 1957, and some 1,400 men have been laid off at the mine, mills, smelter and refinery and the workweek cut to 5 days. A surplus of copper supplies, with foreign copper abundantly available at coastal points at 2 cents, more or less, discount over domestic prices, has stimulated this condition.

Lead and zinc is now being produced by only two company-managed operations. Two other companies have turned their mines over to lessees. The other operators of former years have closed their mines under the attrition of long time adverse economics. The Tooele Smelter, of the International Smelting & Refining Co., closed its lead smelter January 1958 and continues to run only its slag fuming plant on cold slag from the slag dump.

Some 3,100 men were employed in Utah lead-zinc mining in 1948 and we have just over 1,000 working at present. Some 23 mines reported production to the State tax commission in 1949, whereas but 4 are operating today.

In 1949 Utah mills and smelters produced 49,208 tons of lead and zinc metal from ore shipped to them by out-of-State independent mines. In 1955 ore from out-of-State independent mines yielded only 6,928 tons of lead and zinc. Cold statistics, but eloquent evidence of the demise of the small independent miner in Mountain State areas served by Utah mills and smelters, i. e., portions of California, Arizona, Nevada, Idaho, Montana, and Colorado.

Mining, since early in the State's history, has held a major role in Utah's economy.

Assessed valuation of mining property constitutes 27.5 percent of total property assessed valuation. That tax base is being reduced drastically by production curtailments and by depressed prices for the metals produced.

In 1950, 70 percent of the railroad revenue freight originating or terminating in Utah was collected on freight from or to the mines. The estimated loss to the railroads on lead-zinc metal shipments alone was $991,000, comparing 1949 with 1955.

One feature of the mining problem not commonly appreciated is that prices of metals fluctuate in response to supply and demand—and not, as in the case of many other major industries, in response to costs. Autos and steel are prime examples of the latter. The supply-and-demand control of metal prices is determined—not on a domestic basis—but on a free-world-wide basis. Domestic costs, composed largely of labor, are higher across the board than foreign costs. The degree of cost difference varies from one phase of the industry to another, but the basic difference remains.

Without import controls, through adequate duties and/or quotas which compensate for differences of cost in domestic and foreign production, the industry will continue to lose important portions of its productive capacity each time a surplus of free-world-wide supply exists.

Under existing free-world-wide import control regulations and practices, the United States market is the only one which permits a substantial inflow of materials in excess of the needs of the individual nations. Hence United States mine operators, labor, and related community business bear the first and fullest effects of surplus production and will continue to do so until import controls are established to affect a realistic relationship between domestic prices for metals and domestic costs of production.

In brief, under present import control provisions, domestic mines in periods of surplus could only be competitive through lowering the standard of living of all labor, directly or indirectly involved, to the levels of the competing countries. A drastically impractical step. The practical alternative, if a healthy domestic mining industry is to be maintained, is sound import control provisions as part of a national mineral policy. We respectfully urge the support of your committee for such measures.

Yours very truly,

MILES P. ROMNEY, *Manager.*

Senator BIBLE. And now, with the indulgence of the other Nevada witnesses—and I am sure they do not mind—Delegate Bartlett, we are very happy to hear from you at this time.

STATEMENT OF HON. E. L. BARTLETT, A DELEGATE IN CONGRESS FROM THE TERRITORY OF ALASKA

Mr. BARTLETT. Thank you very much, Mr. Chairman and members of the committee. I do appreciate your hearing me at this time.

In giving my testimony I want to say it is gratifying to be associated in point of time with Governor Russell, with whom I had the pleasure of serving on the House Committee on Interior and Insular Affairs. And I will say for the record that nothing that Senator Barrett did when he was a member of the same committee, and nothing that Senator Dworshak did as a member of another committee was calculated in any way to harm the mining industry. I know that we all retain the same interest, even a greater interest in promoting that industry which is so important not only to our own areas but, indeed, to the entire Nation.

From what has been said here recently it is apparent that the illness is easier named than curative medicine prescribed, and I confess at the outset that I have not been in any laboratory. I have not come out with any cureall. However, I know what the idea is, of course. The idea is essentially that there are not enough miners. If there were they might be similar to certain other classes and they would live comfortably off the taxpayers forevermore. But I know that the people in the mining industry do not want to do that sort of thing. They do not want to take tax dollars from the other people of the Nation. They simply want the climate established that will give them a fair break, an even chance to pursue their work, and it isn't going to be easy to attain. That we all know.

However, it can be done, and, as Governor Russell so aptly said, this must be a program looking some distance into the future. It must not be something for the next 2 or 3 years. No short-term program will really help.

Actually, Mr. Chairman, I suppose that after changing a few figures I might simply conclude my testimony by saying ditto to Governor Russell's presentation about Nevada, because practically everything he said there could be applied to Alaska and, I suspect, to every other mining State.

I think the plight of Alaskan mining is epitomized in the sentence from a letter written to Senator Murray by Mr. Phil Holdsworth, Alaska commissioner of mines, and this sentence is as follows, and it refers to antimony, and I quote:

> This metal is found throughout most of Alaska, but the deposit of the Stampede mine is the highest in grade of any appreciable size deposit under the American flag.

Here is the largest high-grade deposit of antimony in the whole United States. That mine is operated by Mr. Pilgrim who is now in the room and who testified before you the other day.

Mr. Pilgrim, I might add, has been an acquaintance and a friend of mine over 30 years. He is one of the first members of the faculty of the University of Alaska, and he has devoted his life to trying to promote mining in Alaska. Here he is in possession of this mine of such magnificent resources and potentials, and he cannot mine it because the price in the United States is not high enough.

Alaska, as you all know, is fabled in song and story as the land of the prospector and the miner, and, if any such description were to be given to Alaska today, Mr. Chairman, the word "fable" would be particularly apt because no prospectors are going out into the hills, and few mines are operating.

As Governor Russell said, Nevada has produced, as I recall, close to a billion dollars in gold and silver, and so it is with Alaska. From 1903 through 1957 the Territory of Alaska has produced something over $900 million worth of gold and silver, and today the gold industry in Alaska is dying. Most of the production comes from one big company. Very few small mines are operating. To my knowledge, there are no year-round gold lode mines; if so, of very small size.

At Juneau, the capital, which was formerly the site of the largest low-grade gold mine in the world, giving a thousand people year-round employment, the plant stands idle. Whether it will ever reopen is problematical.

We have a mining industry which, to very large extent, is going, going, or gone, or exists only in potential. The potential, however, is there, and if this committee or this Congress or this Government can come up with some sensible, practicable program, some program based on merit, those potentials are going to be realized.

We all know how much American capital has flowed across the border in these last several years for the development of the Canadian mining industry, and I do not think we object to that at all. We want our good neighbors of the north to develop and prosper, and if that process can be expedited by the supplying of our capital, all to the good. But we know, too, that man's geographical line established in the boundary between Alaska and Canada, for example, did not mean that we are going to find minerals on one side of that line, namely, in Canada, and none in Alaska.

But you would think that was the case because Canada mining flourishes across the border in Canada. It languishes on our side of the border in Alaska.

It is true, we have there the largest platinum mine under the American flag, and one of the mine stockholders and officers of the operating company told me here just the other day that it likewise is suffering.

Curiously enough, our largest quicksilver mine in Alaska is now being operated the other way around, namely, by Canadian capital, and we are all for that, too. But, Mr. Chairman, I talked over the telephone just the other day with Mr. Holdsworth, our Commissioner of Mines, and he expressed regret and asked me to convey to you, the members of the committee, that he could not be here to testify in person. But he asked me if I would request your permission to insert in the record of these proceedings the letter he wrote to Senator Murray on March 21, together with an addition by way of a letter on March 25.

Senator BIBLE. Both letters may be made a part of the record in full.

(The letters referred to follow:)

TERRITORY OF ALASKA,
DEPARTMENT OF MINES,
Juneau, Alaska, March 21, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

MY DEAR SENATOR MURRAY: The mining industry in Alaska has reached a point where few, if any, of its representatives have the time or funds to travel all the way to the Nation's Capital to appear before your committee in the industry's behalf. The undersigned respectfully requests that the following statement be made a part of the record of your proposed hearings on programs to aid the mining industry scheduled for the week beginning March 24, 1958.

We believe your committee is by now well aware of the "soft" market position of all nonferrous metals, whether they are classified as strategic or not. If you are convinced that the mining industry in the United States is in need of governmental support, then consider the industry in Alaska where the cost of doing business is 1½ to 2 times the cost of doing business stateside, depending on the location of the mineral deposits relative to transportation facilities. This simply means that our deposits must be higher in grade than those now in production in the United States if investment capital is to consider their development.

Now, let us take a look at the various minerals to be considered by your committee.

Antimony: This metal is found throughout most of Alaska, but the deposit of the Stampede mine is the highest in grade of any appreciable size deposit under the American flag. When market conditions have been favorable, this mine has been the No. 1 United States producer. The very competent owner-operator of this mine has been struggling for many years to find a reasonable market for his product and consequently his production has been intermittent. The long-range picture has been so unsatisfactory that the operator is not justified in developing the full potential of this deposit.

Copper: Alaska has been an important producer of copper in the past and can be again when the domestic producer has a competitive chance against foreign metal imported into the United States.

Iron ore: Southeastern Alaska contains a 400-mile belt along which extensive deposits of titaniferous magnetite occur. Other deposits of nontitaniferous magnetite, generally associated with copper, are also known. All of these deposits are found within a few miles of tidewater open to year-round transportation. We believe we have the ore reserves for a west coast steel industry, particularly when the metallurgical problems caused by small amounts of titanium are overcome.

Mercury: Alaska ranks second only to California in mercury production among the States. Our major producer, DeCoursey Mountain Mining Co., was reported to be the second largest producer in the United States and its possessions for 1957. Short of a firmer market for mercury, or a long-range plan by the administration, the operator is hesitant to develop the potential of this promising deposit, and has been forced to concentrate his efforts on production from the higher grade portions of the ore body when the market is favorable. Other promising deposits are under development in west-central Alaska.

Nickel: A 120-mile belt, also in southeastern Alaska and on the coastline, contains numerous outcrops of norite or gabbro, an igneous rock which historically has been the host rock of all the important sulfide-nickel deposits in North America. Wherever this type of igneous rock outcrops, nickel mineralization is found, which is similar in occurrence to the famous Sudbury district of Canada, which supplies most of the nickel consumed in the United States.

Tin: Alaska has the only known tin reserves under the American flag and has produced 90 percent of the United States total to date. Even in our best year, however, we only produced a fraction of 1 percent of the United States consumption. There has been no incentive to develop new reserves in recent years as it is impossible to produce tin in competition with foreign sources at present metal prices.

Barite, fluorspar, gypsum, lead, manganese, mica, molybdenum, sulfur, tungsten, and zinc also occur in Alaska in known deposits but with a much more limited potential based on our present knowledge.

Now, the question is, "What can we do to create an economic atmosphere for the mining industry which will result in sufficient profitable production to justify full-scale development of our actual mineral potential?" After all, that is our main goal—to "prove up" all possible domestic resources which will be available in time of national emergency. This can only be accomplished by insuring a profitable market for at least part of our domestic capacity.

The present administration appears to be in favor of the extension of the Reciprocal Trade Act which in practice has allowed reductions in protective tariffs and shown us the uselessness of the relief provisions. The only countermeasure offered has been a so-called long-range minerals program, which has attempted to alleviate the distressed condition of a few minerals on a short-term basis.

Members of Congress on the other hand (and particularly those representing the western mining States) have been advising us that the Reciprocal Trade Act should be allowed to expire, thereby opening the way for the establishment of proper protective tariffs or import controls on foreign-produced minerals, which will enable the domestic mining industry to regain at least some of its former stamina. As a result of our experience with the program in effect the past several years, we will have to agree with this line of reasoning.

It just doesn't make sense to take the American taxpayer's money and spend it in foreign countries assisting in the production of minerals which are imported in competition with domestic production, and at the same time spending more of this same taxpayer's money in a halfhearted attempt to keep the domestic industry alive. This merely results in aggravating an already serious situation. It encourages an oversupply of minerals while at the same time increasing the cost of domestically produced minerals due to the inflationary effect of the increased tax burden.

From the above reasoning, it would appear that effective protective tariffs or import controls are necessary if the domestic mining industry is to survive and continue to develop the ore reserves which are needed to meet those unexpected emergencies, which history has shown to arise.

Sincerely yours,

PHIL R. HOLDSWORTH,
Commissioner of Mines.

TERRITORY OF ALASKA,
DEPARTMENT OF MINES,
Anchorage, Alaska, March 25, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

MY DEAR SENATOR MURRAY: Reference is made to our letter of March 21, 1958, regarding the hearings to be held this week on programs to aid the mining industry. In our original transmittal one of our most important minerals was omitted, and we hereby request the following addition to our statement be added to the official record:

"Chromite: This is one of the most promising potentials Alaska has, and at the same time one that will be hit hardest should Congress or the administration fail to come up with some answers in the very near future. One operator, Kenai Chrome Co., has developed their property over a period of several years to the point where they have been able to ship 7,000 tons of metallurgical grade chrome to the United States annually for the past 3 years. In order to recover all available chromite from their deposits a mill was constructed in 1957 for the beneficiation of low-grade material. This mill was placed in operation early in 1958 and unless something is done to change the chrome program as scheduled, this operator will be forced to close down his mine and mill before the year is out. At the present rate of production the quota for the present chrome-purchasing program will be met about August 1, 1958."

In order to expedite the presentation of this material we are asking Mr. Earl Pilgrim to add it to his oral statement before your committee.

Sincerely yours,

PHIL R. HOLDSWORTH,
Commissioner of Mines.

Mr. BARTLETT. Thank you, Mr. Chairman.

These letters describe the mining situation in Alaska in respect to the minerals that may be found there, their potentials. And Mr. Holdsworth makes certain definite suggestions as to what he thinks ought to be done.

I assure you that in all of this, Mr. Chairman, I do not speak on account of any personal interest. It is for the interest of the industry.

It is true that formerly I had a small holding, but my most recent calculations demonstrate conclusively that the price of gold will have to be raised to $250 an ounce before I can go back to mining

However, seriously, it is not well for the Nation, in my opinion, the Nation as a whole, that this industry should be in the doldrums and should confront the very distinct possibility, if present circumstances are to exist in the future, of virtual extinction.

We may find ourselves caught short at the wrong time, and, if that were to happen, the person in any Eastern State, for example, who has no interest in mining whatsoever would suffer equally with the miner who is so badly hurt right now, because these minerals we must have, and we have them in the ground, and there is no good reason why they should not be brought out of the ground at a reasonable and decent profit to the producer for the enrichment and betterment of all the citizens in this country. And I wish you well, Mr. Chairman and members of the committee, in your deliberations on this most important subject.

Thank you very much.

Senator BIBLE. Thank you very much, Mr. Delegate.

Would you, by chance, have some suggestion or solution for the plight in which we find ourselves?

Mr. BARTLETT. I qualified myself right at the outset by saying that, unhappily, I do not. But I do agree most positively with Senator Dworshak and Senator Barrett in feeling that it is going to be extremely difficult to adjust the tariff situation adequately to ake care of this problem, because we must be realists, and we know, as the able Senators so aptly said, or I will say it for them, that the cards are somewhat stacked against us in that respect.

Senator MALONE. Mr. Chairman, could I ask Mr. Bartlett a question?

Senator BIBLE. Certainly.

Senator MALONE. Do you believe, as some of the Senators have said here, and Governor Russell, that Americans ought to have equal access to the American market?

Mr. BARTLETT. No, Senator Malone, I do not. I think they ought to have a priority, not equality.

Senator MALONE. A little more than equal access?

Mr. BARTLETT. Absolutely and positively.

Senator MALONE. I think you are absolutely right. But that was a very modest request that I presented to you.

You are, then, for regulation of foreign trade on the basis of fair and reasonable competition. In other words, let the Americans compete for the American market on a profitable basis, and let us not keep anything out that simply gives the American a break to make a reasonable profit in their American market. You would be for that?

Mr. BARTLETT. Yes, of course, I should be for that, Senator.

We live in perilous times, we all know. We want to do the right thing and the proper thing for our allies who have joined us in this great cause. But their interests will not be served if we begin to encounter great difficulties in our own country, of our own making. They will be hurt along with us.

Senator MALONE. That is true, of course.

Then, as a matter of fact, is it not true—and I will say to you that I know that it is—we are the only free-trade country in the world today? Other nations in this Western Hemisphere protect their workingmen and their investments and industries once the investment is made.

The gimmick there is in Geneva under the General Agreement on Tariffs and Trade, as I explained following Governor Russell's testimony, when they make these multilaterial agreements they agree to lower certain tariffs, and they lower American tariffs on imported things, but they do not have to keep their agreement as long as they can show they are short the dollar balance payments, which they can show until our wealth is equally divided. That ruling is in the GATT regulations that Congress at one time approved. You are aware of that, I suppose?

Mr. BARTLETT. I have heard of it.

I will qualify myself by saying that I am not one of the experts in that field.

Senator MALONE. It does not take an expert to read it, and as long as that is a fact—and I tell you that it is a fact, and I hope you do verify it—then the Executive here has the authority, and Secretary Dulles has said under my questioning in the Senate Finance Committee that if, in his opinion, the sacrifice of a part or all of any industry in this Nation will further his foreign policy, he may do that.

That is a gimmick that had never been followed until 1934.

In 1789 we had the first Tariff Act, and always it was a question of the tariff or duty, representing roughly that difference in wage standards, taxes, and cost of living here and in the chief competing nations.

So, while I sympathize with the statement that this cannot be done, that the cards are stacked against us, I am here to make this positive statement:

In my opinion, the people of the Nation are 5 years ahead of Congress, and they are ready to protect American workingmen and investors.

I appreciate the idea that the people in the State Department and the administration have, as we all do, I am sure, in the first place. We are a great creditor nation, and in that situation I think historically money has to flow out, and always has and always will.

In the next place, however, I do believe that there is room for adoption of a fair policy in that respect and simultaneous protection of our own workmen and our own people who have capital investment.

In the mining industry, for example, I do believe that the two are compatible, that they can be reconciled, that the thing will work both ways. I, as many other Members of Congress, have had bills in for a long while to permit a minimum sale of duly mined gold on the open market, and under the Democratic administration bills of that

nature were frowned upon. No favorable report could be had, and under the Republican administration it has been exactly the same.

I recall conversations down at the Treasury Department, and, among other arguments made, was the one that, "Well if we permit that to happen, the price of gold will probably fall $35 an ounce anyway on account of the deluge."

Whether or not that is right, I think it is a pretty poor excuse because it denies the American producer the opportunity, whether it is great or slight, to get the maximum price for his product.

Mr. Bartlett, in that connection, I know you have presented bills. I have one in here for a free market for gold to determine what the price might be after the Americans have freely bought and sold it for a few months. But talking about the State Department, the Constitution of the United States does not give the State Department any hand in regulating the economy of the Nation. It puts it in the legislative branch—article I, section 8. It says that the legislative branch shall regulate the duties, imposts, and excises—what we call tariffs. In the executive department it puts the fixing of foreign policy, deliberately.

Those old hedgehogs that had everything happen to them—George Washington, Jefferson, and the rest of them—knew that when the two are together you have a dictatorship. In other words, you can trade one for the other.

Secretary Dulles thinks you have to purchase these agreements, which, in my opinion, are worthless.

Nevertheless, if we want to amend the Constitution of the United States we can easily ask for an amendment and let the people vote on that amendment, and put the two together.

I think they would shoot the man that introduced it because the people do not realize that Congress has tied them together.

In June they are separated again if we just sit still and don't extend the 1934 Trade Agreements Act.

I do not admit that we are beaten. I think we are going to stop it.

Senator BIBLE. Senator Dworshak, have you any questions? Or Senator Barrett?

Senator BARRETT. No.

Senator DWORSHAK. No.

Senator BIBLE. Thank you very much, Delegate Bartlett. We appreciate your coming over.

Mr. BARTLETT. Thank you.

Senator BIBLE. I would be very happy to have comments now, or suggestions—solutions possibly—from the secretary of the Nevada Mining Association, Mr. Gordon, a longtime friend of mine.

STATEMENT OF LEW GORDON, SECRETARY OF THE NEVADA MINING ASSOCIATION

Mr. GORDON. Thank you, Mr. Chairman.

I am very grateful that I have been permitted to appear before this committee. It is an honor and a privilege.

I have endeavored to be of all possible assistance to Governor Russell, to the mining industry, and, indirectly, to the governors of the 11 Western States. However, I feel that I can add very little, if anything, to what Governor Russell has said. I think he has made

an able and comprehensive statement as far as the mining industry is concerned.

If there is any question that any of the Senators present would like to ask, or any further information, Mr. Chairman, that you may wish, I will be glad to do what I can.

I have made a note of the two requests you did make, which I will see that you get. But I think that anything I might add to what Governor Russell has said would be redundant, and I think he has covered the situation fully.

Senator BIBLE. May I say, Mr. Gordon, if anything occurs to you, this record will be kept open for some time. You may feel free to furnish whatever you may wish to it, and it will be incorporated in the record—any particular material that you have.

May I make this comment? I was interested in finding out from some of the industrial commission people of the State of Nevada—they are the commission that carries the industrial insurance on all of the employees of the State, and they completely cover the mining industry—and I understood them to say that the premiums paid by the mining industry to the Industrial Commission of Nevada had declined 65 percent since a year ago.

Mr. GORDON. That is correct, Mr. Chairman.

Senator BIBLE. I think that is a very significant index of how mining has deteriorated in the State of Nevada.

I have likewise had directed to my attention the last report of our State employment security department, showing that the total number of unemployed people eligible to receive unemployment compensation in the State of Nevada has jumped to 7,400 in the month of February, which was an increase of 85 percent over the comparable month of 1957, and this particular release attributes that almost entirely to the curtailment of mining in the State.

I think those are significant statistical facts. If you have any comment, I would be very happy to have you give it.

Mr. GORDON. I would like to add, Mr. Chairman, that I am not appearing in an academic capacity. I am a mining engineer and I have managed mines for some 30 years, all types of mines. I have been on the firing line all the time, long before there was any semblance of Government assistance. I was relegated to digging it out of the ground to meet the payroll, and I would like to have a solution to this problem.

There is one thing, incidentally, that has no particular bearing upon this hearing, and that is with reference to the gold industry. I doubt if anything can be done to induce people to go into gold mining, but I think there might be some slight benefit for those already in it and making a slight profit if the depletion allowance were increased on gold from 15 to 23 percent, as it was increased on all the other metals, because, Mr. Chairman, if anything in the world needs any incentive of any kind to keep our gold production going, and if the gold mines now in operation are going to survive, I think that will be a small gesture that would help them and would induce them to continue operation.

Senator BIBLE. I agree with you thoroughly.

May I ask you this one question, based upon your many years of familiarity with the mining industry as a mining engineer and as a

successful operator, and now as secretary of our mining association: What are your views on stockpiling programs?

Mr. GORDON. After all, Mr. Chairman, that is, at best, a stopgap measure. It does not solve the problem. It has been of assistance while it lasted, but it is not the answer to what I would call a long-range mineral policy.

Senator BIBLE. I am very happy to hear you say that.

Senator Malone.

Senator MALONE. Mr. Gordon, I agree with you that the Governor has covered the situation rather thoroughly, and, knowing your experience and your deep interest, even if you were not secretary of the Nevada Mining Association, you have always had that interest.

You agree with the resolution passed by the Nevada State Legislature at their last meeting; do you not?

Mr. GORDON. Yes, sir.

Senator MALONE. In other words, that the Congress should take over its responsibilities to regulate foreign trade and adjust tariffs. And do you think we would be in this mining trouble if that were true?

Mr. GORDON. I doubt it very much.

Senator MALONE. I want to congratulate you for making the trip with the Governor. You are very helpful and I am counting on a visit with you on this general subject before you leave.

Mr. GORDON. It is a privilege to accompany Governor Russell. He is not only a personal friend, but I have the greatest respect and admiration for him.

I would say for the record that I doubt if there is any governor of any Western State that has ever been a better friend of the mining industry than Governor Russell. I say that without any reservation. He has been consistent in his support. He has been tireless in his efforts, and there is not anything that we have ever asked him to do that he has not been glad to do.

Senator BIBLE. Thank you.

May I ask just one question, and I really meant to ask it of the Governor and it slipped my mind.

Has any attempt been made on a State level to grant any type of relief to the mining industry, tax moratoriums, or anything in that nature?

Governor RUSSELL. No. Of course, you realize that the mining industry is taxed in Nevada on net proceeds of mines.

Senator BIBLE. They are also taxed on a real property basis, too.

Governor RUSSELL. That is true. Of course, on the real-property basis they are taxed the same as others are, approximately 35 percent on $100.

Senator BIBLE. I was wondering if there was any suggestion.

Governor RUSSELL. No, there have not been. In fact, Nevada has probably some of the finest laws as far as mining is concerned of any of the Western States as far as taxation is concerned.

Senator MALONE. I would like to ask one more question.

Senator Bible has had a bill in to defer the assessment work on mines, and I am ready to join him in that if that is what the mining industry wants, and I was going to discuss it with Senator Bible. We work together on much legislation here.

What do the people of Nevada want in that regard? Should we defer it for a year as we have several times in the past, or not? There is a difference of opinion. I must tell you that.

Mr. GORDON. I have consulted, Senator, with many of my people and they are rather neutral on the matter. There doesn't seem to be any great advocacy of it or against it. They have no objection to it and they are not especially for it.

It is true that it might help in some instances, but I personally doubt if it would be very beneficial because most of the men out of employment that have mining claims, if they find something to eat, will get out and get the work done, and the larger companies will do theirs anyway. I don't want to go on record as being for it or against it, because, as I say, I represent 35 active mining companies in Nevada, and then we have about 32 affiliate members who are purveyors of machinery, supplies, and explosives, and we have associate members. The membership comprises about 300 members, including the geologists and mining engineers. The opinion is not by any means unanimous.

In other words, we would not be opposed to it, nor would we go out and make a big fight for it.

That may not be the answer you want, but that is all the answer I can give you.

Senator MALONE. That is the answer we want. We want to find out what the public sentiment is.

Many of the people that want it are some of the smaller people that do not have the money to go out and do this, and they have to earn a living some other way, and then some give the argument that the large mining outfits will hire some workers to go out and do this business and that provides employment. So I do not know what the future is going to say.

Mr. GORDON. I was going to mention, Mr. Chairman, many people own unpatented mining claims who are interested in other businesses and professions, and, as Senator Malone has said, if the assessment were not eliminated, it would give employment to men who might be hired by people of that type to do the assessment work.

Senator MALONE. Then there is on other thing basic, of course, that we always have to consider, that the only way you can hold a claim, until you have patented $500 worth of work, is to do the work, and if you do not want to do it, someone else might want the claim and do it. That is the law and that is what it is for. So it does not hold a lot of claims without any work.

Mr. GORDON. That is correct. And I recall the days of the moratoriums. I doubt if they helped too much. As long as people can hold something without it costing them anything or any effort, they are perfectly willing to do it.

I again want to reiterate that in Nevada we are not definitely for it or definitely against it.

Senator BIBLE. I am very happy to get your expressions, Mr. Gordon.

In introducing the bill it was for the purpose of soliciting suggestions. It seems to me that the bill has merit in helping the little fellow. I am not particularly concerned in assisting the big mining companies, for example, that are members of your association that can well afford to do their assessment work.

The suggestion has been made—I think it has some merit—that you could probably put a claim limitation on it, that you could give a moratorium for the 10 claims, or 15 claims. Beyond that number, then, of course, the work would have to be done.

I was very much interested in rechecking this to find that since the turn of the century the Congress of the United States has declared 23 moratoriums. So there is ample precedent. It is the little fellow that has to go out and do this work and spend a few dollars that might not have those few dollars to do it that it was designed to help, and I am glad to have your expressions, and if you develop anything further along that line I would be very happy to have it.

Mr. GORDON. If I may add one further statement, I would say that five claims would be more nearly the number.

Both you and Senator Malone are familiar, as well as Governor Russell and myself, with mining conditions, and if a man has exempted from assessment work 5 claims, which is 100 acres, that will just about protect him in anything worthwhile and not have him tie up a whole tremendous area.

Senator BIBLE. By the same token, beyond the 5 claims those that are trying to do acquire a lot of claims when they go back for non-assessment work would be required to do the 100-per-year annual assessment work. I think there is some middle ground for working out the bill that could be of help to the small man. It is designed to help the little fellow.

Senator BARRETT. Mr. Chairman, I would like to say that I agree with you on that matter of waiving the assessment work on these claims, particularly so because of the situation that prevails in our State with reference to the uranium mining industry at the present time. We have a large number of our people who went out and spent large sums of their own money and put forth great efforts on their part at the request of the Government itself to find uranium in this country, and now, after they have spent the money and spent their time and put out their efforts, the Atomic Energy Commission refuses now to grant authorization for mills to process the ore, and they have an absolute monopoly on it. And, of course, there is no market for it, and these fellows find themselves high and dry.

The worst thing about it is the fact that we have contracts with Canada and other foreign countries for more than half of our needs in the line of uranium concentrates. There is some question whether they will even extend those contracts when they expire in the next 3 or 4 years, and these people will find themselves in the position where there will never be a market for the ore that they have discovered at the request of the Government. And certainly it would be unfair and unjust and improper to require those people to continue to spend the money each year to protect their claims, because of the fact that they cannot sell their ore on account of the position taken by the Atomic Energy Commission itself.

I believe probably we ought to have general legislation. I do not know whether it ought to be just confined to 5 claims or not. Some of these fellows have as many as 30 and 40 claims. They would still go broke even if you protected them to the extent of 5 claims. That is all I have to say on that.

I would like to ask Mr. Gordon one question.

Senator BIBLE. Certainly, Senator Barrett.

Senator BARRETT. We have a Sugar Act that has been in operation for a long while, and it has handled this question of our domestic industry as against foreign imports in a pretty good shape. It has protected both the producers in this country and the consumers in a pretty respectable fashion, in my judgment.

Essentially the act provides for an import quota and it assigns to these foreign countries so much of our domestic market, and retains, of course, for our own producers about a third of the market in the case of sugar. It imposes a tax on the foreign producers, and it makes payment to the domestic producers. So it is in the nature of an import quota and a duty imposed on foreign production coming into this country, with the payment made to the producers of sugar beets and sugar cane in this country.

Do you think that we could work out a formula that would protect the producers of tungsten, we will say, in your State, or copper in your State, to the extent where they would be able to compete against foreign production if we had some such arrangement for those minerals?

Mr. GORDON. That is entirely possible, Senator. It would need considerable study.

The tungsten situation is rather a difficult one. In the last Engineering and Mining Journal market report they quote tungsten at $19.50 to $20 per short ton unit of tungsten trioxide. That is f. o. b. domestic mines or mills, as the case may be. That is tungsten trioxide, and that includes a duty of $7.93 per short ton unit.

Foreign trioxide is quoted from $11 to $11.50 a short ton unit. So, with a tariff of $7.93, imported tungsten in this country can be purchased for $17.93 to $19.43 a short ton unit with comparatively molybdenum-free tungsten changing a slightly higher price.

My people tell me that in consideration of the wages paid in Nevada, which will average, I would say, about $2.20 for an 8-hour shift, plus the tremendous increase in the cost of all supplies and equipment, their costs of producing tungsten are on the order of $35 a short ton unit.

Senator BARRETT. It is roughly twice as much.

Mr. GORDON. Right. And that is due entirely to the difference in the wage scale.

I don't want to be facetious, but I am somewhat familiar with the subsidization of the Korean tungsten situation, and while I don't know—I haven't been in Korea—I imagine they might give their miners a couple of fish and a bowl of rice a week, and we cannot compete on the basis of $22 a day with that sort of thing.

I think the unfortunate part of it is that the American taxpayer advances the money to put them in production.

I think that your suggestion on sugar, Senator, is possible. I think such a thing might be worked out. Isn't there a wool bill also that is similar?

Senator BARRETT. Yes. It is similar to a certain degree. The Wool Act merely continues the tariff. That was one of the bases upon which the act was predicated, that the tariff would be held at a constant figure, and the tariff on wool and wool textiles is used for the purpose of making payments to the wool producers of this country up to the difference between the average cost of wool produced here and incen-

tive levels set by the Secretary of Agriculture. And, of course, it has worked out quite satisfactorily all the way around. However, it is a little different from the approach of the Sugar Act.

Mr. GORDON. It is on that order.

Senator BARRETT. Yes. And if we could work out a formula, it seems to me that would be sufficient to protect against foreign competition for those producers who are doing business on a pretty fair economic basis; it might not be sufficient to protect the marginal producer, but it could protect the good workmanlike producers of the country.

Mr. GORDON. I may say one thing, Senator. It would be impossible for any legislatiton or any tariff to protect certain producers that are marginal. I mean it would be ridiculous. We cannot build up tariffs to take care of those people; for instance, tungsten with .2 and mercury with 3 or 4 pounds. There has to be a reasonable middle ground in there to protect legitimate, going, if I may say, worthwhile producers who have a reasonable grade of ore.

In other words, we cannot get into philanthropy and charity on a thing of that kind and take care of people who have extremely marginal mines.

Senator BARRETT. I agree, and it is something that we better be realistic about and come up with some proposal that is workable.

I appreciate very much the testimony from your citizens from Nevada. I think they have made a very worthwhile contribution. I have always felt that way about the Governor, and I believe his engineer is very well qualified.

I know that they have taken the lead in the west as far as mining is concerned, and I should like to commend them for their efforts, and I hope that they can come up with some concrete proposal that will be a basis upon which we can all unite and try to work out something here in this Congress.

Senator BIBLE. Thank you very much, Senator Barrett.

Senator MALONE. Mr. Chairman.

Senator BIBLE. Senator Malone.

Senator MALONE. This sugar situation is handled solely by Congress, is it not?

Senator BARRETT. Yes.

Senator MALONE. The duties and the quotas and everything. And recommended hearings are held by the proper committees of the Senate, the Senate Finance Committee and the Ways and Means Committee in the House, and then whatever Congress passes, that is the way it is handled, is it not?

Senator BARRETT. That is right.

Senator MALONE. It is not handled in Geneva, and nobody can trade the industry for any foreign policy.

Senator BARRETT. That is right.

Of course, we have to take into consideration that it is a little easier to work out these problems for wool and sugar because they are so-called deficit commodities. We produce roughly about a third of the sugar that we consume in this country, and we produce less than half of the wool that we consume in this country. So it does lend itself to a little easier solution.

But I am constrained to believe that we could take the formula in both of these acts and work out something that would be reasonably satisfactory for nearly all of the other industries in the country, not only mining but everything else.

Senator BIBLE. Thank you very much for your suggestions, Senator Barrett, and I will suggest to my able and good friend, Louie Gordon, when he returns to the invigorating climate of Nevada that he give them very prompt study.

Mr. GORDON. I might say, Mr. Chairman, I feel that you are unduly complimenting me.

Senator BIBLE. I have known you many years, and I am delighted to do it.

Mr. GORDON. Thank you very much.

Senator BIBLE. Bob Stopper.

STATEMENT OF ROBERT STOPPER, SENIOR PARTNER, MINERVA SCHEELITE MINING CO., WHITE PINE COUNTY, NEV.

Mr. STOPPER. My name is Robert Stopper. I am the senior partner in the Minerva Scheelite Mining Co. with tungsten operations in White Pine County, Nev. I am a graduate geologist of Stanford University, and have had 13 years' practical mining experience. In addition, I was a commodity geologist for the United States Geological Survey for 2 years.

I appreciate the opportunity to appear before this committee. I am appearing as a small mine operator that is familiar with not just administration of a mine but also development, exploration, mining, milling, and, most important, marketing problems.

I will not burden you gentlemen with statistics that have already been brought before this committee in other testimony.

I would like to make one fact clear. I am not here for a handout. I am here to request action be taken to stabilize the domestic mining industry which has nearly been put out of business in the past 18 months.

The domestic mining industry is being forced out of business by imported metals and minerals from low-wage scale countries. It is evident that we must have some sort of an adjustment between our high standard of living and the lower standards that exist in foreign countries. If conditions are not changed so the domestic mining industry can operate at a reasonable profit, it will cease to exist.

I think it imperative that the domestic mining industry be kept operative, if for not other reason than national security. Recent experience has shown that we cannot depend on outside sources of raw materials in time of emergency, and I think a necessary foundation for mobilization is a stable operating domestic mining industry.

It is my opinion that the domestic mining industry can best be stabilized on a long-range basis by the use of fair and adequate import taxes and quotas.

Experience has shown the present laws are ineffective in providing fair and reasonable equalizing tariffs. This is due to the provisions of the 1934 Trade Agreements Act. I hereby recommend that said act be allowed to expire in June of this year so that the Congress of the United States can resume their constitutional responsibility for the regulation of tariffs.

Senator BIBLE. Thank you very much.

Senator MALONE. Mr. Stopper, I think you made a very good witness, and your being in the business yourself is a help.

How did you stay in business the last 5 or 6 years, with the exception of 1958 and the latter part of 1957?

Mr. STOPPER. Under the provisions of the Aspinall Act.

Senator MALONE. What was that act? It fixed a price enough above what we though here would be the difference in the labor and the taxes and cost of doing business here and the chief competing nation? Is that what it was?

Mr. STOPPER. That is correct, Senator.

Senator MALONE. Is there any other way of doing it, by special legislation of that kind, which I do not like either? It is simply something that has to be suggested every year or two and is a very unstable thing, as shown by the fact that from 1953 we went along and then 4 times the House turned down the appropriation, and, therefore, you went out of business. Is that right? Is that not it?

Mr. STOPPER. That is correct.

Senator MALONE. Can a miner depend on the job, or an investor depend on investments, in your opinion, in mining where legislation must be renewed every 3 or 4 years or an appropriation must be made every year in order to keep one in business?

Mr. STOPPER. No; a miner or investor cannot, and until we have some stabilization the investments in mines, I believe, will continue to decrease.

Senator MALONE. How long does it take a mine investor to get in business, generally speaking, and what is the procedure? Suppose you are a mining engineer and you represent some capital. I think that is the usual way. You have a few thousand dollars that is ready to go to work. What do you do? How do you start out to operate?

Mr. STOPPER. It is a very difficult job, Senator. I have been through it with personal experience and, believe me, I have worked my head and back off. I don't have hands like these from punching a typewriter, gentlemen.

This particular mine that we are operating now we have operated for 11 years. It has operated for 24 of the past 25 years. At the conclusion of World War II the former operators considered the mine worked out and shut it down. So we took it over. It took us approximately 2 years to get that mine back into production.

Does that answer your question?

Senator MALONE. It does to some extent. But if you did not have a mine that had been operated, and if you had the money and you would know that you might find a certain grade of ore and a certain amount, that is to say, with the experience a geologist could tell something about it, you start out to find that. You find it, and then you develop it, and maybe several, before you get anything that is worth putting very much money in. Then when you get a good deal of money in it maybe that does not work out. How do you find these mines? What is involved in it?

Mr. STOPPER. Exploration.

Senator MALONE. You find prospects?

Mr. STOPPER. I think the prospector, as we normally think of him, is a thing of the past.

Senator MALONE. What ran him out of the hills?

Mr. STOPPER. I think the general trend for many years is that the small people seem to get smaller and the large people seem to get larger. There has been no incentive for the man to find anything.

Senator MALONE. There is no incentive now to find half of 1 percent or 1 percent tungsten production, is there?

Mr. STOPPER. Absolutely none.

Senator MALONE. It would not be profitable?

Mr. STOPPER. No. Our cost of producing tungsten right now is $37 a unit.

Senator BIBLE. Is that for your particular property or the tungsten industry?

Mr. STOPPER. No. For our particular property.

Senator MALONE. What do you think would be a normal production cost throughout the States like some of the Eastern States, like North Carolina? Do you think you could approach that world price?

Mr. STOPPER. No.

Senator MALONE. What is the average cost of production of the known mines in the last 15 or 20 years, with about 700 of them in production at one time? What would the cost run?

Mr. STOPPER. I would say somewhere between $35 and $40 a unit.

Senator MALONE. Then what would be the price that you would have to be confident that you could secure if you went prospecting and worked 2 or 3 years bringing it in? What price would you look for in order to have a profitable operation?

Mr. STOPPER. Could I put it this way, Senator: I think a price of $40 a unit would increase production to a point of approximately half the domestic consumption. It would probably take a price more in the order of $50 a unit to increase domestic production to the full extent of domestic consumption.

Those are my opinions.

Senator MALONE. Suppose the average cost is $37. What do you have to have in addition to the $37 for a profitable operation?

Mining is a gamble. You run out of ore and you prospect and explore for ore. What should be the price?

Mr. STOPPER. I think $40.

Senator MALONE. $3 profit on a unit?

Mr. STOPPER. That, of course, depends a lot on the operation, whether it is a large-scale operation working on a quantity basis or a smaller operation that is working on a quality basis.

Senator MALONE. I know that when the Tariff Commission was handling the tariff, and it is still the law, the 1930 law, they did not take the highest price or the lowest price. They investigated and took an average price that the American could compete with in the American market and produce a profitable unit.

We talk about marginal mines. These people in the State Department talk about a marginal mine. They mean where you are paying the miner $20 a day or $17 a day, it is marginal as far as Korea is concerned. That is what they mean. What I mean is an average operating price, and, as you suggest, if this law is allowed to expire and we bring in the Tariff Commission and the Congress and they determine that the tariff at all times will be flexible and provide a price of that kind so that you can compete for the American market, that would be satisfactory, you think?

Mr. STOPPER. Yes, sir.

Senator MALONE. That is all.

Senator BIBLE. Just one further question, and it is prompted by the resolution of the governors that indicate that steps be taken to assure the domestic mining industry at least one-half of the domestic market.

Do you have any comments as to how much of the domestic market the tungsten industry should receive under some type of a quota system?

Mr. STOPPER. I would like to quote from my statement, Senator:

> I think it imperative that the domestic mining industry be kept operative, if for no other reason than national security.

Senator BIBLE. What does that mean in point of percentage of the domestic mining industry?

Mr. STOPPER. I believe that 50 percent would keep it operating.

Senator BIBLE. I asked the question purposefully. Mr. Long, who is the president of the Hale Mining Co. of North Carolina, indicated in his testimony he thought it might need be as much as two-thirds of the domestic market.

Mr. STOPPER. Of course, every metal is different.

Senator BIBLE. I recognize that. I was just soliciting your suggestion.

Mr. STOPPER. Of course, I would like to see the domestic mining industry have more than 50 percent. But I am trying to be realistic, too.

Senator BIBLE. I think we must all be realistic if we are going to get the job done.

Senator MALONE. Mr. Chairman, let me ask just one more question.

Let the tariff represent the differential between the labor cost and taxes and cost of doing business in this country and the chief competing country and that would do the job, would it not? And if you did not produce quite all the tungsten here that you needed, at least you would be in business so that you could expand it immediately. But if that tariff always represented that difference in cost between the wages and the taxes and cost of doing business here and in the chief competing nation, do you think that would do the job?

Mr. STOPPER. I think so.

Senator MALONE. That is what the tariff law says now, of 1930. You suggest, and I see that you agree with the legislative resolution, No. 14, of the 1957 legislature, the act be allowed to expire then on June 30, and they make no more of these agreements, and in 6 months all of them are abrogated and they go back to the Tariff Commission basis. Do you like that idea?

Mr. STOPPER. I do, Senator.

Senator MALONE. What we are going to have to do in my opinion in Congress is to listen to a few people in the United States of America that live west of the Potomac River. What we are hearing now from the people that live east of the Potomac River is that you have to support every other nation in the world, you have to divide your markets with them and your cash.

I am not one that follows that policy and principle because I think it will be utter destruction of the American standard of living. Do you agree with that, if we keep this up?

Mr. STOPPER. I think we have been going down that road for some time.

Senator MALONE. The State Department allows them to remake the industrial map of the United States of America, and that is what they have done. In other words, they go into production areas in certain areas, and we are living on a national defense budget, $40 billion a year. We want about $10 million more now. We think we are going to bring this standard up or stop the slump. Maybe we can do it temporarily, but we have not let the water settle since 1934, have we? We have had two wars and preparations for war. Is that not about it?

Mr. STOPPER. I think the two wars that we have had are the only things that have kept the domestic mining industry alive at all.

Senator MALONE. Is that not a fact with other industries? Now it is catching up with the textiles, machine tools, and the crockery, and 500 other industries; is it not?

Mr. STOPPER. Yes.

Senator MALONE. I think we should just listen to the folks in this country.

My mail is getting heavier every day. They know something is wrong. They do not know what, and 98 percent of my mail is against big industry in Europe and free trade.

Senator BIBLE. Thank you very much, Mr. Stopper.

Mr. Wagner, do you care to say anything? We are happy to have you with us.

This is Mr. Bill Wagner, who is the secretary of the White Pine County Chamber of Commerce of Nevada.

STATEMENT OF WILLIAM WAGNER, SECRETARY OF THE WHITE PINE COUNTY CHAMBER OF COMMERCE, NEVADA

Mr. WAGNER. Thank you.

I know we are late, and I will just take a moment.

I would like to tell you, though, that last year I traveled over 50,000 miles over the State of Nevada by car. I have been in every town and mining camp, and the conditions through the State are exemplified in White Pine County. You folks deal in big numbers here and we only have 10,000 people in the county. Over 60 percent of our mining employment has been lost in the last 18 months just in White Pine County. I think that is fairly typical of the State.

The resort areas are not hurt like the mining industry is. We certainly would like to see the Congress of the United States resume their responsibility and the only way they can resume it is to allow this Trade Agreements Act to expire.

Senator BIBLE. I share your views, and I hope that the administration resumes some responsibility along that line in working this problem out, too. I think it is a joint problem.

I want to thank you for your statement, Mr. Wagner, and I want to assure you we are going to do our dead level best to try to be of assistance to you.

Mr. WAGNER. I know you will.

Senator BIBLE. I know you have a real challenge out in White Pine County, and you are going to do a good job, and we are going to try to help you.

If there is nothing further, we will be in recess until 2 o'clock.

There are still a number of witnesses, and those who have prepared statements and care to do it may leave the statements, and they will be laid in the record as if given in person.

We will recess until 2 o'clock, and the first witness at that time will be Mr. Huntting.

(Whereupon, at 12:20 p. m., the committee adjourned until 2 p. m. this same day.)

AFTER RECESS

(The subcommittee reconvened at 2 p. m., Senator Alan Bible presiding.)

Senator BIBLE. The committee will come to order.

The first witness of the afternoon will be Mr. Marshall T. Huntting, supervisor, Division of Mines and Geology, Department of Conservation, State of Washington, personally representing Gov. Albert D. Rosellini, Governor of Washington.

Mr. Huntting, we are very happy to have you with us.

Mr. REDWINE. May I place something in the record before Mr. Huntting begins?

Senator BIBLE. Has it something to do with his appearance?

Mr. REDWINE. No, sir. Mr. Chairman, I was directed by the acting chairman yesterday to check on the law in respect to depletion allowances on foreign operations by United States mining companies, and I was directed to get it in the record as soon as possible today.

I would like to report that the domestic companies are entitled to depletion allowances on their production from mines outside of the United States. However, the rate of depletion for foreign production may not be the same as that allowed for domestic production.

For example, the depletion allowance for lead and zinc produced domestically is 23 percent. For production from foreign mines by United States companies it is only 15 percent. Copper is the same—15 percent for both foreign and domestic production.

It should be noted that for mining operations in the Western Hemisphere, but outside of the United States, our American companies get an additional 14-percent reduction in their income-tax rate.

That is all.

Senator BIBLE. Thank you, Mr. Redwine.

Mr. Huntting, we are very happy to have you with us.

STATEMENT OF MARSHALL T. HUNTTING, SUPERVISOR, WASHINGTON STATE DIVISION OF MINES AND GEOLOGY

Mr. HUNTTING. I am Marshall T. Huntting, supervisor of the Washington State Division of Mines and Geology, and I am representing the State of Washington and Gov. Albert D. Rosellini. We appreciate the opportunity to express our views regarding a long-range minerals program.

I have a prepared statement I would like to read, but first I would like to say that we in the State of Washington are in somewhat the same position as they are in the Territory of Alaska, in that we are just across the border from the western part of Canada in which

mineral development is an important part of the economy, and mineral development has been very aggressive, of course, in Canada.

It has been considerably less active in Washington. We have no reason to believe at all that the mineral deposits are chopped off at the border between British Columbia and Washington any more than they would be cut off physically between the borders of Alaska and Canada. So we are forced to the conclusion that the difference in the amount of development that we have had in Washington has to be accounted for in a difference in the policy, in the policy climate that our industry is working under in the United States and Washington, as compared with that of Canada.

That, of course, is what we seek to change and we would like a more favorable climate and one that we can look forward to on a long-range basis, on a long-range minerals program, that might be established here.

A program that will afford some measure of stability to the mining industry is urgently needed. This has been forcibly brought to our attention in the State of Washington within the past 2 years. As a consequence of the continued decrease in metals prices, only 2 of the 4 large zinc-lead mines that operated in 1955 were still in operation by the end of 1957, and both of these have been cut back to a 4-day workweek.

The abandonment of the Howe Sound property, our only large copper mine, last summer brings copper production practically to an end in Washington. These losses in production amount to about 5 million pounds of copper, 4 million pounds of lead, and 28 million pounds of zinc per year, which had a total annual value of $6 million. This production loss is almost one-third the total value of metallic mineral output in Washington in 1956.

In recent years we have had a small amount of production of tungsten, chromite, manganese, and mercury, but under present economic conditions with current government mineral purchase programs for the stockpile coming to an end and no effective aid for these metals included in the proposal for a long-range mineral program made last year by the Department of the Interior, we can expect little or no extension of life for the producers of these metals. In fact, production in Washington has already stopped for most of these metals.

The price floor plan for mercury has had a stabilizing effect, but will end this year. The stockpile purchase of tungsten was effective so long as it lasted, and stockpile purchases of chromite, manganese, and other metals have been effective, but under the present quotas these will be extremely short-range rather than long-range programs.

The legislation introduced last year that would impose sliding-scale excise taxes on imports of lead and zinc should be enacted. For copper, we strongly support S. 2998, which would establish an import tax and a peril point at which such a tax would be imposed.

I would add here that we support in principle the provisions of Senate bill 2998, but feel that in order for the provisions of that bill to be truly long-range in effect, they should be amended to allow a flexible formula under which the import tax would be established that would take into account changing mining prices and changing copper prices.

Of the strategic metals and minerals, we feel that some reasonable program must be established for chromite, tungsten, mercury, manganese, antimony, and asbestos. Uranium miners also should have the assurance of some degree of stability for the future in order to plan for continued production of this highly important commodity.

Civilian demands for metals are increasing all the time, but imports are filling more and more of this demand. For example, the share of domestic lead consumption supplied by imports has risen from 36 percent in 1947 to 57 percent in 1956; and for zinc the corresponding increase has been from 37 percent to 58 percent.

During the same period, production in the United States has dropped so that the 1956 production of lead was 11 percent and of zinc was 12 percent below the 1946–50 average. Governor Rosellini and the industry in the State of Washington supported the resolution adopted on February 26, 1958, at the western governors' conference, to take—

all steps which may be necessary to assure to the domestic mining industry at lest one-half of the domestic market or the present proportion—

whichever is higher.

Foreign production costs are but a small fraction of the soaring costs for domestic producers. The whole economy of this Nation has a stake in keeping our own highly paid and efficient mining employees on the payroll, paying taxes, and purchasing consumer goods. Without legislation to offset at least part of the advantage held by cheap foreign production, substantially all of the producers of most of our strategic minerals would be out of business. I am sure no one wants this to happen, even if it does mean paying slightly more for some of these essential materials.

We believe that the most practical solution lies in price floors established by flexible import taxes that would go into effect when open-market prices fall below peril points set at levels appropriate to domestic production costs.

In some instances, it will be advisable to use the proceeds of the import tax to assist domestic producers. The import tax would have to be maintained at the proper level so that the proceeds would be sufficient to maintain high enough payments to domestic operators to keep them in business in competition with imports.

For many metal producers this is a fight for survival and Washington, along with the other mining States, for reasons of self-preservation of our mining industry, will support any measure that will be effective in establishing a long-range mineral program that will work.

Governor Rosellini wishes me to express the appreciation of the State of Washington for this opportunity to present these views to the committee.

Thank you very much.

Senator BIBLE. Thank you very much for your fine statement, Mr. Huntting. I have no questions.

Our next witness is Mr. Hollis M. Dole, director of the Department of Geology and Mineral Industries of Oregon.

STATEMENT OF HOLLIS M. DOLE, DIRECTOR, OREGON STATE DEPARTMENT OF GEOLOGY AND MINERAL INDUSTRIES

Mr. DOLE. Mr. Chairmen, I wish to acknowledge with deep appreciation the introduction Senator Neuberger gave me early this morning. I know I do not need to mention that you will find both Senators from Oregon, Senator Neuberger and Senator Morse, keenly aware of the difficulties facing mining today. I am certain they will be working closely with this subcommittee in seeking the solutions to mining, with its many and diverse problems.

My name is Hollis Dole. I am a geologist and the director of the State of Oregon Department of Geology and Mineral Industries. I have been asked to appear before this committee by Gov. Robert D. Holmes, of Oregon, by our State department of planning and development, and by the chrome miners and prospectors of Oregon.

I can assure you that these groups and my department are most appreciative of this opportunity to outline to you the bleak future confronting segments of Oregon's mining industry unless prompt assistance is forthcoming. I sincerely hope that from the hearings you are conducting, answers will be found to many of Oregon's and the Nation's mining problems.

Mr. Chairman, I am going to confine my remarks almost entirely to chrome this afternoon. I would like to have it noted, however, that the State of Oregon is in accord with the recommendations made at the western governors minerals program policy in regard to mercury and gold.

The Government program for purchase of metallurgical grade chrome from domestic sources will be completed by the end of June this year. Already mines are closing and jobs are being cut off. Within 3 months an active, live segment of the Nation's mineral industry will cease and the displaced men will take their place in the ever lengthening line at the unemployment office.

Senator BIBLE. You say that program runs out this June. This June or June of 1959?

Mr. DOLE. The program, as it reads, says completion of 200,000 long tons or until June 30, 1959. It is now within just a few thousand tons of being at an end and all indications are it will cease probably at the end of May, but it may go on until the end of June.

Senator BIBLE. Because you will have reached the quantity.

Mr. DOLE. 200,000 long tons. In either case a month or two make very little difference.

Senator BIBLE. Thank you.

I have just been advised that you only have 10,000 tons left to go.

Mr. DOLE. Well, the production is going about 4,000 tons a month, so the end of May will just about make it.

Senator BIBLE. Thank you.

Mr. DOLE. The ore that filled the domestic stockpile program was delivered by many prospectors and small mining companies located in Oregon, California, Washington, and Alaska. Although the bulk of the 200,000 tons came from a relatively few deposits there were over 2,000 shippers to the chrome buying depot at Grants Pass, Oreg. To obtain ore from 200 sources, it is conservatively estimated that over 4,000 occurrences were investigated.

In Oregon, which furnished less than one-fourth of the stockpile, the State department of geology and mineral industries has made over 2,500 free chrome analyses and examined nearly 150 prospects at the request of prospectors. Through the stockpile program, the art of prospecting has been kept alive in these areas and men have been actively searching the hills adding to the knowledge of the country's mineral resources.

In none of the regions in which chrome was obtained was mining the principal source of income for the nearby communities. In all of the areas, chrome mining was a part of the diversified economy that made for prosperity. Closure of the mines at this time of declining prosperity is working a serious hardship on many of the small towns. As an example of what one of these small mines can mean to a small community, I quote from a letter by Bill Robertson, Grants Pass, Oreg., owner of the Oregon chrome mine:

During the 6½ years of the program through December 31, 1957, our own operations have paid out a total of $733,349.98 in direct labor, or a yearly average of $112,823.07. In addition, we have paid out to 1 local truck operator $205,906.53 in trucking costs. His average labor per dollar of freight revenue is 26.29 cents or a total of $54,132.82 in direct truck labor, a yearly average of $8,328.12.

In addition, we have expended thousands of dollars for supplies and materials in the logal area, a portion of which is labor involved in furnishing these supplies.

A conservative estimate would show in excess of $250,000 in income taxes returned to the Federal Government on labor and profits involved in our own operations.

Using these figures, it can readily be seen that a large portion of the money paid by the Government for domestic chrome has been returned in the form of taxes. I believe that if accurate figures were available, it would be shown that the cheap foreign ore in the stockpile has cost the Government little, if any, less than the domestic ore.

As this committee so well knows, all chrome used by industry in the United States comes from overseas. World production of chrome ore in 1956, as given by the United States Bureau of Mines, was as follows:

	Short tons
North America	267,560
South America	4,000
Europe (including U. S. S. R.)	1,000,000
Asia	1,730,001
Africa	1,161,124
Oceania	60,760
Total	4,200,000

United States consumption of chrome ore in 1956 was 1,846,600 short tons, or almost one-half of world production. Demand for heat and pressure-resisting steels will require that chrome be used in increasing quantities for as far as we can see into the future. Undoubtedly it was this thinking that prompted the establishment of the various Government programs to build a stockpile of this critical mineral.

As Montana, Alaska, Washington, Oregon, and California are the only major sources of chrome in the United States, it was entirely proper and showed good judgment to encourage domestic exploration. Because of the critical nature of chrome and because the Nation's primary source for the ore will always be overseas, it cannot

be fathomed that the Nation will discontinue its domestic prospecting and blindly stake its future on a stockpile.

At the present rate of domestic production, it would take a great many years to appreciably enlarge our stockpile, and if prospecting is continued, the Nation will be maintaining chrome mining know-how, building up information on reserves, and be in a position to rapidly expand production that would be safe from submarine attack. Subsidiary benefits of keeping the prospector in the hills searching for minerals, broadening the economic base of many areas, and maintaining employment rates would also accrue.

The need and desirability of maintaining domestic chrome mining should be quite evident. The question of how this can be accomplished appears to be the thing that cannot be agreed upon. The following is offered with the hope it will serve as an aid for immediate action, for if something is not done right away, reviving of the industry will become many times more difficult, and may prove impossible.

Possible solutions for maintaining domestic chrome mining:

1. Tariffs and excise taxes: Any tariff that would allow domestic mining to exist would probably be so high as to cause an unwarranted burden on the user of chrome alloys.

2. Quota: This doesn't answer the much-higher-than-world-price need for the domestic miner and even if it did, the small tonnage produced in the United States makes this plan improbable of success.

3. The "wool plan": The "wool plan" might work. It certainly should be given some consideration. However, it is believed marketing difficulties would seem to prevent its success.

4. Continuation of present program: The present program has proved highly successful. It has developed additional supplies of domestic chrome and has worked smoothly and efficiently.

In this respect, Mr. Chairman, I would like to read into the record at this time a letter that our Department received from the California Division of Mines, after which time I will turn it over to your reporter.

Senator BIBLE. You may proceed.

Mr. DOLE. This letter from the California Division of Mines is dated March 21, 1958, and is addressed to a mining engineer in our Department, Mr. Ralph S. Mason:

CALIFORNIA DIVISION OF MINES,
March 21, 1958.

DEAR MR. MASON: Sorry for the delay in answering your letter regarding chromite reserves, but I've been in the field.

This is going to be more of a discussion than an answer to your question, mainly because I can't give a reasonable pat answer. As far as California is concerned, any simple statement listing chromite reserves would be misleading. The use of such terms as "probable," "indicated," and "inferred" does not modify that statement. Chromite is different from most other ores when it comes to useful reserve estimates, largely because the ore-bearing zones are very difficult to delimit, very little exploration is done by the miners during production, and even very small ore bodies can be mined about as profitably as large ones.

Prior to 1950, the Geological Survey—and he means the United States Geological Survey there—conducted an extensive study of California chromite deposits, and made statements regarding reserves in their reports. Their estimates naturally appeared conservative because they listed only specific reserves for which there was reasonable evidence. Any dreamy statements regarding specific deposits probably would have resulted in large losses to hopeful miners during the current stockpiling program.

Actually, the bulk of the chromite produced in California during this program has come from newly discovered ore bodies, the largest being quite remote from

any previous large mines. Those deposits listed by the USGS as containing the largest reserves, such as the Pillikin and Seiad Creek deposits, still contain those stated reserves; apparently they could not be economically worked under the leapfrog time limitation conditions of the program.

Since the current program started in 1951, production from California has been about 145,000 short tons; this in spite of the rather unfavorable location of the purchasing depot and the time limit uncertainties. But this amount is considerably in excess of excellent probable reserves estimates available in 1951, if those deposits are excluded which have not contributed to the recent production.

Yet known reserves at the present would be larger than ever if examinations were up to date. We haven't made detailed studies, but good ore bodies are visable at the working faces of many of the mines. However, good evidence of this is the notable rise in production during the last couple of years as development work has begun to pay off.

Many USGS reports make vague statements, regarding chromite reserves, that at least as much ore can be expected from a given area as has been already mined there, granting sufficient incentive. I think that this is about as reasonable a statement as can be made, and that it will remain true as mining progresses. We have a certain number of square miles of outcrop of ultrabasic rocks in which there are a certain number of known chromite-rich zones. Ore mined to date has been almost entirely from ore bodies exposed at the surface, roughly those occupying the first 50 feet or so of depth. The nature of chromite being what it is, there are at least as many ore bodies in the next 50 feet, and so on. In addition, many of our outcrop areas of ultrabasic rocks have not been prospected, at least not adequately. Whenever there is incentive, chromite will be produced in California in amounts roughly proportional to the various conditions of the incentive.

On the other hand, I do not expect that in the foreseeable future our deposits will be able to supply entirely the United States industrial demand. There is no evidence that we have sufficient tonnage that can be mined as cheaply as many of the large foreign deposits, regardless of labor costs.

I know you are aware of the conditions mentioned in this letter, but it is the only way I can answer your letter honestly.

Yours very truly,

GORDON B. OAKESHOTT,
Chief, Division of Mines.
By SALEM J. RICE,
Assistant Mining Geologist.

We were discussing the continuation of the present program, at which time I mentioned that it proved highly successful and that it had developed additional supplies of domestic chrome and had worked smoothly and efficiently.

The prospector and small miner would like to have an indefinite extension. We know this is not possible and recognize that any stockpile program is temporary and difficult to keep established.

5. Electroprocess plants: If the chrome miner could turn his ore into ferrochrome or electrolytic chrome and obtain a guaranteed market for his product, it is believed he could stay in business.

A preliminary study on this possibility was made in March 1958, that is, earlier this month, by the industrial consulting firm of Ivan Bloch & Associates, Portland, Oreg., for the State department of planning and development and the State department of geology and mineral industries. The summary conclusions of this reports are as follows:

Based upon the various assumptions detailed in the body of this analysis, it may be concluded that ferrochrome production operations at plants located in the West could produce a high-carbon ferrochrome at prices (exclusive of profit) very close to present market prices.

On the basis of somewhat higher operating levels of total costs, with purchases of chrome ore at levels equivalent to those of the United States General Services Administration stockpiling depot at Grants Pass, Oreg., the excess of delivered

prices (exclusive of profit) over market prices at various consuming centers over present market prices would range between $73.30 to $21.50 per ton, depending upon the ore source, plant location, and market considered.

On the other hand, utilizing lower operating levels of total costs (especially those of low power costs as might be attainable from the United States Booneville Power Administration system), but with purchases of chrome ore at the GSA levels, the delivered price (exclusive of profits) would be less than present market prices by $32.90 to $52.70 per ton depending upon the ore source and market considered.

Studies on the feasibility of a low-carbon ferrochrome plant and an electrolytic chrome plant have not been made by these State departments. It may be assumed, however, that products from these plants, too, might fall within the economic range determined through the high carbon ferrochrome study.

A nonprofit electroprocess plant to continue domestic chrome mining is dependent on:

First. A long-range (5 to 10 years) guaranty from General Services Administration to purchase for the national stockpile the plants' product at a price not less than the current market price for those alloys.

Second. Government assistance in obtaining the electroprocess plant. Government assistance on a plant could be in the form of either—

(1) Building, operating, and owning the plant through some agency of the Government; or

(2) Through a Government guaranteed loan to a cooperative organization.

It is not known for certain that this plan will work, but preliminary studies indicate it will and because of the vital need for maintaining domestic chrome mining, it should be given careful consideration before rejecting.

Regardless of which plan is adopted, something must be done immediately. A few months from now all chrome mines will be shut down and it will become increasingly difficult to reopen them. Therefore, as a stopgap measure until a decision is made, it is essential that an additional 45,000 long dry tons (1 year's production) of domestic chrome be authorized at once for purchase by the stockpile.

Senator BIBLE. Right at that point, and for the record, what would be the cost of that program? Do I understand we purchase it today at $115 per long dry ton?

Mr. DOLE. Yes. That is $115 a long dry ton for 48 percent chromite with a 3-to-1 chrome-iron ratio. The cost of the average ore that goes into the market, I would estimate—those figures are available—would be right around $85 a ton, so it would be 85 times your 45,000, which would be just about $4 million.

Senator BIBLE. Thank you.

Mr. DOLE. In conclusion, I wish to emphasize that the chrome program now ending and the proposed program to sustain chrome mining through electroprocessing of newly mined ore does not deplete domestic reserves. On the contrary, all mined domestic chrome would be in a state where it would be immediately available when needed. In addition, as ore is mined it, too, would be ready when needed. Certainly the time to prepare for emergencies is before they occur.

As any miner can tell you, ore is developed only by exploration, and it takes a profitable mining venture to pay for exploration. As soon

as exploration stops, the mine is taking its last breath. If a program is not established, domestic chrome production has had its last breath. The United States, then, becomes more and more dependent on an overseas supply of this critical mineral.

Senator BIBLE. Mr. Dole, might I ask you what would happen if we followed your suggestion and continued the program for another year? What would happen at the end of next year?

Mr. DOLE. That would be the same old story, Senator. I just make this proposal for an electroprocess plant recognizing that it will take a little time to get it working, if it is accepted, to get it underway, but the chrome miners cannot allow for the time necessary to make this study and get it authorized, and that, too, sir, would be just a stopgap measure. I mean the 45,000 tons.

Senator BIBLE. That is the way it appears to me. What is the estimated cost of this electrolytic process plant that you mentioned? Have you an estimated cost on it?

Mr. DOLE. No, we do not have that as yet, but I would guess that it would cost around $2 million.

Senator BIBLE. If you were to have that project today, what would that do toward putting chrome on its feet?

Mr. DOLE. The way it looks to me, if a cooperative plant or Government-owned plant, if you wish, were to take chrome, pay the chrome miners the same price they are obtaining today, make the material into ferrochrome or electrolytic chrome, and then is paid by GSA for this material, really and truly GSA would be putting the material in the stockpile at roughly what they are paying now.

Senator BIBLE. What would be the advantage of the plant?

Mr. DOLE. The advantage of the plant would be that it would pay for the mining. The plant would only be to maintain domestic mining. You are doing away essentially with the profit of one of the intervals between the mine and the finished product.

Senator BIBLE. Tell me this: Have the stockpile objectives been met insofar as chrome is concerned?

Mr. DOLE. You mean the overall stockpile, as far as chrome, or the 200,000 long tons?

Senator BIBLE. No, the overall stockpile objective.

Mr. DOLE. I do not have access to that information, but I understand that it has. My information is that the chrome stockpile was predicated upon a 5-year war, that it was filled. Then the thinking was reduced to three, so apparently there must be a great quantity of chrome ore from overseas sources in the stockpile. I do not have that figure.

Senator BIBLE. It can be obtained. I think what we are trying to do is develop a record to see how we can be of some realistic help to the chrome industry. As I understand it, your great problem is the tremendous differential in the cost of chrome on the world market, and the cost of producing it in the United States; is that correct?

What is the price of a long dry ton of chrome on the world market?

Mr. DOLE. It is about $57 to $59 per ton. That means it costs about 5 cents, about a nickel a pound for chrome. You are paying the chrome miners right now about twice the world market; in other words, about 10 cents per pound for chrome. Electrolytic chrome sells for about 33 cents a pound, so we feel that by taking the chromite and making

electrolytic or ferrochrome in a nonprofit plant, the plant being there only for the purpose of keeping chrome miners, you could turn that material into the stockpile and still keep the mines running.

Senator BIBLE. What would be the particular rationale of turning chrome into a stockpile which is already exceeding its maximum objective, if that is right?

Mr. DOLE. There is quite a gap between taking chrome ore and turning it into a usable metal. By turning the chrome ore into the metal, you not only have stockpiled the ore, but you have stockpiled electricity and manpower. In other words, you have a finished product ready for immediate use, rather than having just the lump ore there, and you will have finished metal there ready for immediate use at the time when it is necessary.

Senator BIBLE. You are, in effect, making the chrome in the stockpile usable industrialwise.

Mr. DOLE. That is right; yes, sir.

Senator BIBLE. None of the chrome mined at the present time finds its way into industrial trade channels?

Mr. DOLE. To the best of my knowledge, the answer is "No." To the best of my knowledge, all chrome is going into the chrome stockpile.

Senator BIBLE. Has chrome in the past ever been competitive with foreign sources of chrome?

Mr. DOLE. If you go back to around 1860, I believe that we did furnish the domestic market. Immediately following World War II, there was one mine in southwestern Oregon that tried to compete on the world market, and it was unable to do so.

Senator BIBLE. Your conclusion, then, insofar as chrome is concerned, is that other than a stockpiling program, there is no other solution such as a tariff, or import quotas, or sharing the market? None of those devices would be of any help to you?

Mr. DOLE. I do not think so, and sharing the market—we produce such a very small amount of our domestic needs that I think it would be very difficult to set up a quota that would mean very much, and the same goes with tariffs and any of the other similar type programs.

Yes, that is right. I think stockpiling is about the only answer to it, but I wish to point out that the amount of production necessary to maintain a chrome program on the west coast is only around 45,000 tons of chrome a year. Yet we use here in the United States about 1½ million to 2 million tons of chrome a year.

Senator BIBLE. Is there any such thing as an electrolytic processing plant for chrome in the United States?

Mr. DOLE. I do not think there is an electrolytic chrome plant west of the Mississippi River. That brings up another point, too.

Senator BIBLE. Is there east of the Mississippi River?

Mr. DOLE. Yes. There are electrolytic plants east of the Mississippi River.

Senator BIBLE. What would happen if we shipped the raw chrome ore to one of these plants and then attempted to put it in the stockpile? As I understand it, the stockpile, insofar as electrolytic chrome, is not feasible?

Mr. DOLE. That is correct.

Senator BIBLE. What would happen if you take the raw chrome ore and ship it east to the electrolytic plant and have it processed into an electrolytic chrome and then sell it to the stockpile? Is that feasible?

Mr. DOLE. I do not think so because of your high freight rates. I think this was predicated on the building of an electroprocess plant on the west coast.

Senator BIBLE. If you did do that, then would you be competitive industrywise? You would not?

Mr. DOLE. From this preliminary report we had on a high carbon ferrochrome plant, it looks very much like we would be.

Senator BIBLE. With world prices?

Mr. DOLE. With world prices right today. Here is another point that I would like to bring out on that, and that is that everyone says that we are going to have a very large increase in population in the West, and although we do have wonderful climate and wonderful scenery out there, they are going to have to do something, and it seems illogical to believe that industry also will not increase in the West.

I think that probably within a few years, with the establishment of an electroprocess industry regarding ferrochrome out there, it would be in a very favorable position to supply this increasing population and industrial growth of the West. I think it would be a very good time right now, before this pressing need for supplying this population is present, to establish such an electroprocess plant on the west coast.

Senator BIBLE. Thank you, Mr. Dole. Senator Dworshak?

Senator DWORSHAK. Yes; one question.

In your statement, Mr. Dole, you say that the stockpiling of chrome ore is at Grants Pass, Oreg. Is the stockpile there exclusively? Is all the ore that the Government requires at Grants Pass?

Mr. DOLE. That is a misstatement, if I have said that. That is the buying depot at Grants Pass, or was at one time, Senator. Now, besides the buying depot at Grants Pass, there is a carlot buying depot.

Senator DWORSHAK. Where is it stockpiled?

Mr. DOLE. I understand that a very large portion of it is stockpiled at Herlong in California. It is on the California-Nevada boundary, just a few miles south of the Oregon boundary, but the bulk of it is being shipped back East and I do not know where.

Senator DWORSHAK. None of it is being processed?

Mr. DOLE. I think in the domestic program it is safe to say it is all in ore form.

Senator DWORSHAK. What are the producers receiving for that ore from the Government, approximately?

Mr. DOLE. It is based on a sliding scale.

Senator DWORSHAK. Approximately how much a ton?

Mr. DOLE. A base price of $115 a long dry ton on lump ore and $110 a long dry ton on concentrates having a chrome-iron ratio of 3 to 1. There is a penalty if it goes lower than that in percentage of chrome and a penalty if the chrome-iron ratio is lower. On the contrary, if they go above that in percentage of chrome-iron ratio, they are given a bonus.

I would say, because they will buy down to 42 percent Cr_2O_3 that most people have tried to approach the lower figure because, as Governor Russell pointed out this morning, it is just good conservation

practice to take out as much of the low grade as your high grade will allow to come out.

Senator DWORSHAK. How much are domestic purchasers of foreign chrome paying for it? Are they buying concentrates, or the finished chrome?

Mr. DOLE. The bulk of it comes out as high-grade metallurgical-grade chrome.

Senator DWORSHAK. What is the comparative price with this $115 for foreign?

Mr. DOLE. $115 is about twice foreign; just about double.

Senator DWORSHAK. You mentioned a while ago you thought some planning or development might be made that would make the price of this domestic chrome competitive with foreign chrome. You do not think we could overcome that big disparity, do you?

Mr. DOLE. Yes; I do, sir.

Senator DWORSHAK. Why does some private company not do it out there, then?

Mr. DOLE. I think there has been some planning to that effect, and I think that such a program as a guaranteed purchase by GSA might be just the trigger that would do it.

Senator BIBLE. May I interject there, if that is true, and if the electrolytic chrome stockpile has not been filled, why would not some private company go out and produce the electrolytic chrome and fill the domestic stockpile, because you have a guaranteed purchase program there?

Mr. DOLE. You see, this whole program has been set up for the prospector. It is a large company out on the west coast that employs more than 10 to 20 men, and I believe you are well acquainted with the prospector as an individual, and he has confidence in his Government and he likes to see this guaranty that the Government will give him. He has more confidence in Government, I suppose, than he does in the private company. I think that makes a good assurance to him.

Senator DWORSHAK. I did not want to discourage you, Mr. Dole, but it was difficult for me to understand why you thought preferential treatment should be given by the Government to the chrome producers. All of the other minerals are in the same difficulty. The tungsten people have had their troubles. The antimony producers and cobalt producers are facing difficulties. The lead-zinc industry is down.

On what basis do you think that the Congress might justify setting up any kind of a program which would single out chrome for preferential treatment? The stockpile is filled. Plenty of ore is available from foreign sources, just like antimony and cobalt, and lead and zinc, manganese and all the other minerals are available, or practically, and I assume in the same category as chrome.

Can you show that chrome is deserving of special attention?

Mr. DOLE. I do not think it is deserving of any more special attention than all these metals that you mentioned.

Senator DWORSHAK. They have not received any consideration. These other minerals have not receive any consideration beyond stockpiling.

Mr. DOLE. I believe this is a solution that would allow us to continue chrome mining, and that is one of the reasons I am back here

to testify today, is to see if we can figure out a plan to continue domestic mining.

Senator DWORSHAK. The tungsten people have been coming back here for 3 years trying to work out their problems.

Mr. DOLE. This is one of the ways I think that it might possibly be solved. I am not sure that it will, but I think it is a suggestion that offers some merit.

Senator DWORSHAK. I agree with you that it would be highly advantageous to have sources of chrome production in this country so we would not have to be dependent upon chrome produced abroad. I am in complete accord with you on that thought, but on the other hand, so long as there is no long-range minerals program for all of the other minerals, I wonder why you feel that chrome would be entitled to some consideration by this committee, or GSA, or someone else?

Mr. DOLE. It would be a step in the right direction.

Senator DWORSHAK. That is not the point. It would be a step in the right direction if something were done to stabilize the production of all these other minerals, but recognizing that nothing has been done, on what basis are you building up any hopes that chrome will receive that consideration which has been denied other minerals?

Mr. DOLE. You might call it hope. I think it is probably a last-ditch stand, Senator.

Senator BIBLE. Thank you, Senator Dworshak.

Did you have anything further to add?

Mr. DOLE. Nothing further.

Senator BIBLE. I think your testimony has been very helpful to the committee. Thank you.

Mr. DOLE. Thank you.

Senator BIBLE. Our next witness will be, by request, because he has a commitment to make, Mr. William J. Barnhard, representing the American Importers of Brass & Copper Mill Products, Inc.

Mr. Barnhard.

STATEMENT OF WILLIAM J. BARNHARD, COUNSEL, AMERICAN IMPORTERS OF BRASS & COPPER MILL PRODUCTS, INC.

Mr. BARNHARD. Mr. Chairman, my name is William J. Barnhard. I am a Washington attorney with the firm of Sharp & Bogan, whose address is 1108 16th Street NW. My firm has been retained as counsel for the American Importers of Brass & Copper Mill Products, Inc., 501 Fifth Avenue, New York City, an association which includes most of the major importers of copper and brass mill products.

We had hoped that Walter S. Guggenheim, a director of the association and a vice president of Van Der Ryn International Corp., could have been here to testify, but because of the shortness of time it was impossible for him to do so.

We recognize, Mr. Chairman, that your committee's concern is primarily directed to the mining of raw metals and minerals, including copper, and yet you cannot ignore the effect any action you may take will have on the use of that copper by fabricators.

We recognize also that your committee's concern is primarily directed to the internal problem of strengthening America's mining industries, rather than the problem of possible import restrictions, and

yet one of the major issues raised here by industry spokesmen has been the need for import restrictions.

I am not in any sense an expert on mining—in fact I know virtually nothing about mining—and I will therefore be extremely brief in my statement here today. But I do know something about imports and the effect of import restrictions, and I would like to leave only this thought with the committee:

The problems of the copper mining industry will not be solved, and indeed may be enlarged, by the use of import restrictions.

The mining industry apparently needs help and I know the committee is diligently striving for a program that will provide the needed help. Of course, as this committee knows much better than I, the troubles in the mining industry are not localized in the United States. The identical problems exist throughout the world, in all countries producing copper.

Obviously this worldwide decline is not the result of imports, any more than the United States copper decline is the result of imports. I would like to suggest that if imports are not the cause of the hurt to this industry, restrictions on imports are not the means to help the industry.

Various proposals have been advanced to restrict imports of copper and copper products, the chief proposal being an import excise tax of 4 cents a pound whenever the domestic price drops below 30 cents.

This is the proposal in S. 2998, now pending before the Committee on Finance. Identical bills are also before the House Committee on Ways and Means.

These bills are obviously designed to establish a price-support program for copper. Experts in the industry tell me there is serious doubt whether such a tax will accomplish the desired result.

But to the extent that it does, to the extent that it raises the price of copper above competitive levels, it will hurt rather than help the copper miners.

The worldwide problem in copper is overproduction, or rather underconsumption. The answer to the problem is increased consumption. This depends on an increase in industrial productivity, an increase in housing starts, and an increase in the use of copper in furnishings, appliances, and the myriad uses to which copper is so well adapted. But it seems obvious that increasing use of copper will not be encouraged by increasing the price of copper.

It is the high price of copper in recent years that has contributed substantially to the low state of copper today.

Fabricators were encouraged, even forced, to find substitutes at prices that were commercially realistic. The tremendous growth in the use of aluminum by fabricators of many products was helped in large part by the high price of copper.

And the possibility of new fluctuations in the price of copper is driving many fabricators to seek new substitutes for the red metal, even now when copper prices are relatively low. Where tables and other furniture used to be made with brass legs, today more often we find brass-plated steel.

The Nation's electrification program, an important market, has been using ever larger quantities of aluminum in place of copper. The producers of shells are developing the use of plastics to replace the brass traditionally employed. Copper screens have been replaced by aluminum screens. The list of these changeovers is endless, and a current development which should be of serious concern to the copper industry is this morning's announcement that the price of aluminum will be dropped 2 cents a pound starting on Tuesday. This is the sort of problem that is really facing the copper industry.

A very significant fact is that most of the fabricators who have turned from copper to some other material are not returning to copper even at today's low prices, largely because of the fear that copper prices will follow their traditional course and rise to new highs again.

I should like to suggest to this committee, therefore, that you will not be helping the copper industry by forcing a price floor under the red metal. You will not be helping the copper miners by forcing all fabricators and consumers to pay a price dictated by the highest cost mine.

You will not be helping the copper industry by pricing its products out of the market. Whether the answer to these problems lies in stockpiling or direct subsidy or some other program, I am not competent to say. But I do not think it lies in restructions on the small volume of net imports entering this market.

Mr. Parsons the other day said this import excise tax was in the nature of handicapping; that is, when the United States horse became stronger, then the heavier weights would be removed from the foreign horse.

The only thing he ignores in that example is that the weights on the horse may be so great that the paying audience will walk out of the race entirely.

The proposed increase of $80 a ton will be, in the first instance, at the expense of the American consumer. But it will also be at the expense of the American miner, who will find his markets disappearing even more quickly than before.

A concluding sentence, Mr. Chairman. I think a subsidy program that helps make our copper competitive is infinitely more helpful and plausible and less expensive than a price-support program that would make our copper even less competitive.

Thank you, Mr. Chairman.

Senator BIBLE. Thank you, Mr. Barnhard. I never heard of American Importers of Brass & Copper Mills Products, Inc. What is it?

Mr. BARNHARD. This is a trade association which has among its members 17 major importers of copper and brass mill products. Their headquarters are in New York.

Senator BIBLE. Who, for the record, are the 17 major importers of brass and copper products?

Mr. BARNHARD. Sir, I do not have the list with me.

Senator BIBLE. Could you furnish that for the record?

Mr. BARNHARD. I will be happy to furnish it for the record, sir.

(The members of the association are as follows:)

MEMBERS OF AMERICAN IMPORTERS OF BRASS & COPPER MILL PRODUCTS, INC.

The Alcobra Co., 1500 Calzona Street, Los Angeles, Calif.
Atlantic Aluminum & Metal Distributors, Inc., 177 Page Boulevard, Springfield, Mass.
Camarge Trading Co., Inc., 1512 Callowhill Street, Philadelphia, Pa.
Franconia Industries, Inc., 527 Madison Avenue, New York, N. Y.
Fromson Orban Co., Inc., 261 Madison Avenue, New York, N. Y..
A. W. Horton & Co., 724 South Spring Street, Los Angeles, Calif.
Lipman's, 1209 DeKalb Avenue, Brooklyn, N. Y.
Norca Corp., 350 Fifth Avenue, New York, N. Y.
The Ore & Chemical Corp., 80 Broad Street, New York, N. Y.
Ovingsteel, Inc., 30 Church Street, New York, N. Y.
Reynolds Fasteners, Inc., 68 Wall Street, New York, N. Y.
S. Bernard Schwartz, 140 Cedar Street, New York, N. Y.
State Metals Division, Wiwoco Corp., 76 Beaver Street, New York, N. Y.
Ufinindo International Corp., 82 Beaver Street, New York, N. Y.
Vanderryn International, Inc., 160 Broadway, New York, N. Y.
David L. Wilkoff Co., Inc., 150 Broadway, New York, N. Y.

Senator BIBLE. Where are these importers located?

Mr. BARNHARD. They are centered in New York.

Senator BIBLE. In the State of New York?

Mr. BARNHARD. Mostly in the city of New York, sir, but they are scattered and some of them are located in other ports.

Senator BIBLE. What do they import specifically?

Mr. BARNHARD. A wide variety of brass mill products, copper tubing, brass tubing, plumbing goods, semimanufactures for the most part; that is, copper fabrications.

Senator BIBLE. These are fabricated brass and copper products?

Mr. BARNRARD. Yes, sir.

Senator BIBLE. They are already fabricated?

Mr. BARNHARD. Yes, sir. These are not importers of raw copper.

Senator BIBLE. I understand. Where do they import these products from?

Mr. BARNHARD. The major sources are the United Kingdom, West Germany, some from Sweden, and, to a lesser degree, other countries of Western Europe.

Senator BIBLE. Could you advise us what the rates on these imports are of the various products that your 17 major companies import?

Mr. BARNHARD. The tariff rates?

Senator BIBLE. Yes, sir.

Mr. BARNHARD. Yes, sir; I should be happy to. There is a great variety of rates, sir, since they are applicable to a great variety of mill products, but as a typical example, brass rods, the duty under the Trade Agreements Act is 2 cents a pound; brazed brass tubes, 6 cents a pound; seamless brass tubes, 2 cents a pound; brass wire, 12½ percent ad valorem.

On brazed copper tubes, it is 5½ cents a pound; on seamless copper tubes, 3½ cents a pound. These, I think, are the major items, although there are many other individual commodities which are brought in, sir.

Senator BIBLE. What would be the approximate value of the brass and copper fabricated articles that are imported into the United States from abroad per year?

Mr. BARNHARD. Sir, I am not sure of the value figures, but I can give you the quantity figures, both for imports and the domestic industry.

The copper and brass mill industry is at a level of 2 billion pounds a year, while imports are running at the rate of slightly over 90 million pounds a year.

Senator BIBLE. 90 million pounds a year?

Mr. BARNHARD. Yes, as against 2 billion pounds from the domestic brass mill industry.

Senator BIBLE. After you import these brass and copper products into the United States, they find their way into wholesale channels of trade?

Mr. BARNHARD. For the most part; yes, sir. They go to jobbers usually; sometimes to fabricators, where tubing, for example, has to be further fabricated before it is ready for its final use.

Senator BIBLE. I would be very happy to have you furnish a complete list of the ad valorem rates for the record.

Mr. BARNHARD. Yes, sir; I will give you this complete list and furnish it for the record.

(The information requested is as follows:)

Applicable duties on copper and brass imports

Tariff paragraph	Product	Effective rate	1930 rate
	Brass:		
381	Angles	6 cents per pound	12 cents per pound.
397	Articles not plated with platinum, gold, or silver.	22½ percent	45 percent.
381	Bars	2 cents per pound	4 cents per pound.
397	Blow torches, compressed air	12½ percent	45 percent.
381	Channels	6 cents per pound	12 cents per pound.
1634	Clippings for remanufacture		Free.
339	Flatware and hollow ware	15 percent	40 percent.
1664	Foundry ash, metallic mineral, crude, n. s. p. f.		Free.
339	Hospital, household and kitchen utensils.	15 percent	40 percent.
397	Lamp bases (for bulbs)	22½ percent	45 percent.
397	Lamps, incandescent, compressed air	12½ percent	Do.
1634	Old, for remanufacture		Free.
381	Plates	2 cents per pound	4 cents per pound.
381	Rods	do	Do.
381	Sheets	do	Do.
1664	Skimmings or ashes		Free.
381	Strips	2 cents per pound	4 cents per pound.
339	Tableware	15 percent	40 percent.
381	Tubes, brazed	6 cents per pound	12 cents per pound.
381	Tubes, seamless	2 cents per pound	8 cents per pound.
316	Wire	12½ percent	25 percent.
	Bronze:		
382	In leaf, 5½ by 5½ inches	4½ cents per 100 leaves	6 cents per 100 leaves.
382	Powder, in leaf	6 cents per 100 leaves plus 10 percent.	
382	Powder not of aluminum	10 cents per pound	14 cents per pound.
382	Powder aluminum	6 cents per pound	12 cents per pound.
382	Powder mounted for stamping or embossing.		.00375 cents per square inch.
381	Rods and sheets	2 cents per pound	4 cents per pound.
381	Tubes	do	8 cents per pound.
316	Wire	12½ percent	25 percent.
	Copper:		
1659	Acetate		Free.
5	Arsenate	12½ percent	25 percent.
1664	Ash		Free.
1658	Bars		Do.
1658	Black or coarse		Do.
1658	Blister		Do.
397	Cable (bare)	22½ percent	45 percent.
316	Cable (covered)	17½ percent	35 percent.

Applicable duties on copper and brass imports—Continued

Tariff paragraph	Product	Effective rate	1930 rate
	Copper—Continued		
1658	Cement		Free.
1658	Clippings from new, n. s. p. f.		Do.
1658	Concentrates		Do.
1658	Converter		Do.
397	Dental amalgam	22½ percent	45 percent.
1664	Dross		Free.
397	Foil	22½ percent	45 percent.
339	Household, kitchen and hospital utensils.	20 percent	40 percent.
1658	Ingots		Free.
1698	Iodide		Do.
302	Manganese	12½ percent	25 percent.
1658	Matte		Free.
1658	Old, or remanufacture		Do.
1658	Ore, n. e. s.		Do.
5	Oxide	12½ percent	25 percent.
387	Phosphor		3 cents per pound.
1658	Pigs		Free.
1658	Plates		Do.
381	Plates, engravers', ground	5½ cents per pound	11 cents per pound.
381	Plates, engravers', unground	3½ cents per pound	7 cents per pound.
341	Plates, for printing book plates	12½ percent	25 percent.
397	Perforated	22½ percent	45 percent.
382	Powdered, as bronze powder	10 cents per pound	14 cents per pound.
1658	Regulus		Free.
381	Rods	1¼ cents per pound	2½ cents per pound.
381	Rolls	do	Do.
1658	Scale		Free.
1658	Scrap		Do.
381	Sheets	1¼ cents per pound	2½ cents per pound.
1659	Subacetate or verdigris		Free.
316	Submarine cable	17½ percent	35 percent.
1659	Sulfate or blue vitriol	2 cents per pound c. c.	Free.
339	Tableware, flatware, utensils, etc.	20 percent	40 percent.
316	Telegraph and telephone wire, covered	17½ percent	35 percent.
5	Thio cyanate (white olive)	12½ percent	25 percent.
381	Tubes, brazed	5½ cents per pound	11 cents per pound.
381	Tubes, seamless	3½ cents per pound	7 cents per pound.
316	Wire	12½ percent	25 percent.

Senator BIBLE. After the imposition of these ad valorem rates, are you competitive with the copper fabricators of the United States?

Mr. BARNHARD. In some markets the imports are competitive. Well, as a matter of fact, sir, almost all of the imports are competitive, for otherwise they would not be imported; but there are many commodities which are not imported because they are not competitive and there are some markets in the United States where the imports cannot meet the low price of the domestic brass mill industry; that is, it varies with different markets and different products.

Senator BIBLE. Of course, we are very interested in the problem of the copper producers, as you can well understand. It is distressing this committee to see domestic mines and domestic communities go completely out of existence.

I note your statement says that that is not due to imports. I would somewhat question that statement. I do not know that it is entirely due to foreign imports, but it certainly is due in a large measure to foreign imports. I do not think there is any complete black and white zone, but that is one of the main factors.

Do you have any thoughts on the suggestions that have been made about the sharing of the domestic market with these various producers, that they have a fair share, a certain percentage of the domestic market? What would be your theory on that?

Mr. BARNHARD. You are talking primarily about raw copper?

Senator BIBLE. Yes.

Mr. BARNHARD. It seems to me from the little I know of the history of raw copper that the history of price fluctuations is a history of a low price level, and by the very fact that it is low, inducing further usage, expanded usage of the metal, thereby increasing the market, raising the price up again to a point where eventually the price gets a little out of line and contrary pressures are put on by the substitution of aluminum, or plastics, or some other metal, and the price then declines.

You know better than I the tremendous fluctuations in the price of the raw copper over a period of any decade. It seems to me that what would be accomplished here is that you would be destroying at the worst possible time, that is, the time when the price of raw copper is at its lowest, the greatest incentive to increasing the use of that copper and thereby raising the price of that copper, by removing the low price which itself is the incentive for further expanded use of the metal.

Senator BIBLE. Has the use of raw copper gone up tremendously since it is down to its present price of 25 cents, or would you know?

Mr. BARNHARD. There have been indications in only the last 3 or 4 days that the low price has induced larger buying, which has in turn resulted in a slight advance in price. Traditionally this has been the pattern in the past, as I understand it, and there seems to be some hope in the industry that the very small change evidenced in the last few days may be continued.

We hope it does. I think in the past that has been the pattern.

Senator BIBLE. What has been the relative amount of brass and copper imports of the people that you represent in 1957 as compared to 1956? Is it about the same?

Mr. BARNHARD. Yes, sir; at about the same level.

Senator BIBLE. How about as compared with 1955?

Mr. BARNHARD. There was an increase in the last 2 years over 1955, but not a very substantial one. I don't have the exact figures.

Senator BIBLE. You say in 1957 it was roughly 90 million pounds? Do I understand that?

Mr. BARNHARD. Yes, sir.

Senator BIBLE. It has been called to my attention that the price of copper in 1934—my table does not go back that far—was something in the neighborhood of 5 cents. Did that increase the demand for copper at that time, or would you know?

Mr. BARNHARD. Sir, so far as copper and brass mill products are concerned, I can say that since that time the use of copper and mill products has increased by 100 percent; that is, where copper and brass mill products just before the war were at a level of about 1 billion pounds, after the war they increased to a level of about 2 billion pounds, and I am sure the price had a substantial effect on that.

I might point out, sir, on this same question, since a large part of the problem facing raw copper today is the competition of aluminum, although this is not the only competitive factor, that whereas the premium of aluminum over copper in 1934 was as much as 17 cents, that premium has been steadily going down; that is, the difference

between aluminum and copper has been steadily decreasing, so that aluminum today—I know this only from this morning's newspaper account which said the present price is 26 cents and Aluminum, Ltd. is planning to drop its price 2 cents on Tuesday—it drops just about to the level of copper. The steady history of prices as between aluminum and copper since before the war has been a narrowing of the competitive price advantage that copper had over aluminum.

While the copper industry has grown, this has been a serious limiting factor and the very high price in recent years was a tremendous spur to fabricators and various processors and industrial consumers to switch from copper to some other substitute such as aluminum, or plastics, or in some cases wood, or almost anything else that would serve the purpose.

Senator BIBLE. These trade associations that you represent are not fabricators? They are the importers of fabricated products?

Mr. BARNHARD. That is right. These are United States importers, jobbers, distributors, and so on.

Senator BIBLE. I suppose you would equally resist any attempt to put a higher tariff upon the fabricated articles; is that correct?

Mr. BARNHARD. Yes, sir, because I think that, too, would have the same effect. It would hurt my clients, there is no doubt about that, but I think it would hurt the American copper industry as well.

It might help the aluminum industry, whether American or foreign. It might help the plastic industry. It would not help the copper industry, and I think this is inevitable: that the answer to these problems is not in protection.

The answer to it is in competition, and if for any reason, if because of high costs, if because of low-grade ores, if for any variety of reasons, the particular company or a particular mine is noncompetitive, then it must either die, or if you think it is important to keep it alive there must be some other way to keep it alive.

Senator BIBLE. Of course if you had a subsidy program the American taxpayer would be paying for that.

Mr. BARNHARD. The American taxpayer would pay infinitely more under a tariff program than it would under a subsidy program. The cost would be infinitely greater, because a tariff program would raise the price on the entire market, including both the domestic and the imported commodity, at all levels of the economy.

A direct subsidy would be paid only to the small limited part of the economy that needs the direct subsidy, whereas a tariff would raise the price of your domestic companies that can compete, as much as it would raise the prices of the domestic companies that for various reasons cannot compete, and the cost to the American public would be infinitely greater and the effects would be much less concentrated and much less direct.

Senator BIBLE. Would you believe a large part of this problem arises because of the differential in wage scales in this country as compared to the wage scales in the foreign countries?

Mr. BARNHARD. I don't think so, sir, and I can cite as an example of why I don't think so not so much the raw copper industry, as the industry with which I have been more directly concerned, which is the copper and brass mill industry. Let me cite a specific example, two examples, if I may.

First, so far as the copper and brass mill product is concerned, the average wage factor in United States copper and brass mill products, and these are based on figures that were supplied by Mr. Veltfort of the Copper and Brass Research Association, is not quite 7 cents a pound.

So far as imports of these identical products are concerned, the extra costs which are unique to imports and do not have to be borne by United States producers, including freight from the foreign mill to the port, export packaging, ocean freight, and the duty, total an average of about 6 cents a pound, which means that if the foreign manufacturer paid absolutely nothing for labor he would enjoy an advantage of no more than 1 cent a pound.

Actually the great bulk of our imports of copper and brass mill products come from the countries which are the highest wage countries in the world outside of the United States. Only about 10 percent of these imports come from Japan. Most of them come from western Europe, where the wages range anywhere from 60 cents to $1.10 an hour.

Senator BIBLE. That is considerably less.

Mr. BARNHARD. Which is considerably less. Which is half or less of what the United States rate is, but still, even if there were no wages paid there at all, the price advantage of the import would be only 1 cent, which is more than made up by the wages actually paid in Europe.

Senator BIBLE. The raw product put in the fabricated article comes much cheaper to them, does it?

Mr. BARNHARD. Yes, sir. Let us take a look at Canada, which is closer to home, where there is not this tremendous wage differential. The wage rates in Canada run from 10 to at most 15 percent below the United States wage rates in this copper and brass mill industry, very close to par. Yet look at the difference in prices quoted by the same company in Canada and in the United States. At a given day last year, and we can get these quotations out of the record if you like, sir, the price on copper tubing was quoted by all United States companies for consumption in the United States at 18.86 cents per foot.

On the same day, the same item was quoted by the Canadian subsidiary of one of the major United States companies at 12.81 cents per foot. Now here is a difference.

The United States price is 50 percent higher than the Canadian price quoted by the same company and yet the wage differential between these 2 plants of the same company is no more than 15 and actually is closer to 10 percent.

Obviously, wage rates are not the primary or even a major factor in the determination of prices in this industry.

If I may, sir, I will give one additional example. Within the United States there is at least one major industry which consumes the products of the brass mill industry and buys those products at a preferential rate, whereas the great mass of the industries, the other industrial consumers or customers of the brass mill industry, buy at list price.

Now, for example, take one particular product which in the middle of last year the preferential industry in the United States was able to buy from the United States mills at 52.79 cents per pound.

On the same day, all other industries in the United States could buy that identical product, same size, same thickness, at the same time and in the same volume and would have to pay 72.16 cents per pound, almost 40 percent higher.

I mentioned before that imports are competitive in some places and not in others. The domestic industry is selling to this preferential industry at a profit. It sells in large volume and presumably is not selling at a loss. Yet their price here is so low that imports cannot meet that price. Imports are virtually excluded from this entire market.

At the same time these same producers, these same fabricators are selling the identical commodity to the rest of the United States market at a price 40 percent higher.

The mere fact that they have inflated this price and are making what must be a tremendous profit on this product is practically an invitation to importers to come in and sell in this market where the domestic industry is maintaining a tremendously high price.

This again is an indication that the prices in this industry are related very little if at all to wages or apparently to any other costs of production.

Senator BIBLE. I am sure you will find many people violently disagreeing with you but I am very happy to get your viewpoint.

Mr. BARNHARD. These are not theories. These are prices taken from pricelists of the companies themselves and are actually prices at which they are sold.

We know in general the volumes in which they are sold.

Senator BIBLE. I think there is a considerable differential. I think that has a great deal to do with the difference in price. I am happy to get your views, Mr. Barnhard. I have no further questions.

Thank you very much.

Mr. BARNHARD. Thank you, sir.

Senator BIBLE. Senator Kuchel, we will be pleased to hear from you.

STATEMENT OF HON. THOMAS H. KUCHEL, A UNITED STATES SENATOR FROM THE STATE OF CALIFORNIA

Senator KUCHEL. Some of the witnesses before this committee have given testimony which I feel is very much to the point. Senator Allott, of Colorado, made some comment which I feel must be the true basis of any national minerals policy.

The President has said we must have a healthy, domestic minerals industry, but the administrative agencies have not yet been able to agree as to how that should be accomplished.

I believe and I think the members of this committee believe that we should add to the President's statement a goal, which if attained, would secure to the country and to the west that objective of a healthy domestic mining industry.

If the metal industry of this country is to survive it must have reasonable assurance of its fair share of the domestic market. I feel strongly that whenever possible that share should be at least one-half of this domestic market; and preferably a little above that figure. National security and the welfare of the West demand such a percentage.

Metals and minerals such as tungsten, mercury, copper, lead, zinc and possibly cobalt have and can be produced in such percentages without any doubt whatsoever. These industries should be maintained at not less than their present levels. Reasonable import control can maintain these industries and this should be done.

Other metals such as chrome, which California shares with Oregon and Montana and manganese which California shares with Nevada and Arizona have never had any serious long-term planning and will require a different approach possibly something along the lines of the wool program.

A sound minerals policy will also make a resumption of gold mining an early possibility. California and the West would not be what they are today if it had not been for the wealth which came from its lodes and its placers.

California needs the gold mining industry now as we have not needed it for 20 years. We need it to take care of part of our 450,000 unemployment, and further, gentlemen, I must confess we need it so that it may pay taxes to help keep our State healthy in these uncertain times.

I feel that every one of you gentlemen would be only too glad to see the gold mines of the West supplying jobs and bringing in revenue for the United tSates as well as the individual States of the West.

Thank you.

Senator BIBLE. Thank you, Senator.

Our next witness is Mr. Sam H. Williston.

STATEMENT OF S. H. WILLISTON, VICE PRESIDENT, CORDERO MINING CO., PALO ALTO, CALIF.

Mr. WILLISON. Senator Bible, I certainly appreciate the opportunity to appear here. I am not going to talk about mercury this time. It may be a little of a relief that you will not hear about mercury from me specifically.

My name is S. H. Williston, of Palo Alto, Calif. and, while I am chairman of the strategic minerals committee of the American Mining Congress, vice chairman of the committee for a national minerals policy, and former chairman of the Western Governors Mining Advisory Council, I am giving this testimony entirely as an individual. While I do not believe that it conflicts in any way with the policies of these organizations, it has not been referred to them for approval and, naturally, they are not in any way bound by it.

There is no need to go into any of the details of the present status of the nonferrous mining industries of the West. Previous witnesses and witnesses to follow have and will thoroughly discuss the difficulties they face—a brief mention is sufficient.

Copper, in which we were self-sufficient 20 years ago, we now import in large amounts.

I might put in at that point the fact that at the present moment in San Francisco large amounts of Japanese fabricated copper pipe are replacing domestic copper pipe sales in the local plumber shops. I thought it might be of some interest to you.

Lead and zinc fall in exactly the same category.

The mercury industry, which supplied all United States requirements in 1943, almost disappeared in 1950 and, while it has recovered to some extent in the last few years, no major producer will show a taxable profit for 1957.

Antimony, of which we produced more than 40 percent of our requirements in the middle forties, is dead except for a little byproduct production.

Domestic chrome mining, not under fixed long-term Government contracts, will terminate this summer when the current purchase program goals are filled.

I could add a little on that chrome plant later if you wish.

Domestic manganese mining will last another year or so but has no long time future.

Gold mining production in the United States is insignificant except as a byproduct.

Only one major silver producer exists in this country.

The tungsten industry, except for 1 mine hoping for a recovery in price, and 1 captive mine, is out of production.

The bulk of the domestic cobalt industry has less than a year to live.

The rare earth industry has no appreciable market for its products although imported rare earths are coming in in large amounts.

Even uranium is faced with uncertainties which have completely destroyed the glamor and made the future outlook most difficult.

Without exception, the major cause of the difficulties of the United States nonferrous mining industry is one of increasing imports. Five specific reasons account for the bulk of these imports. The first of these is tariff reduction over the last 20 years. As to copper, a 50 percent ad valorem tariff has been reduced to 0; as to lead-zinc, a 65 percent tariff has been reduced to less than 10 percent; as to mercury, a 30 percent tariff has been reduced to less than 10 percent; as to antimony, a 16 percent tariff has been reduced to 3 percent, and as to manganese, a 16 percent tariff has been reduced to 4 percent. Many of the other metals now have no tariff at all.

Senator BIBLE. In that connection and since you do name as one of the causes of the difficulties the increasing imports of copper, you just heard Mr. Barnhard in his testimony and as I understood the gist of his testimony, it was to the effect that the main difficulty is that the high price of copper is the thing that has contributed to the low state of copper today and that imports have had very little to do with it.

You are an authority in this field and I wonder if you would like to comment upon that thesis.

Mr. WILLISTON. I could hardly follow his reasoning. I must confess, Senator. It is true that 2 years ago when the price of copper went up to 45 cents, 50 cents, and 55 cents a pound in the world market that aluminum replaced copper to a large extent.

On the other hand, the testimony given was that the price of aluminum was now higher than the price of copper and I see little that would indicate that copper should lose additional markets to aluminum.

I noticed the previous witness testified that he was a representative of importers of manufactured products.

Senator BIBLE. That is right.

Mr. WILLISTON. I do not know about the operating costs of fabricators in Britain but we have heard something about the fabricating costs of copper in Japan and the fact that they are able to put copper into San Francisco at prices roughly 25 percent below domestic copper would indicate that those operating costs are low.

Senator BIBLE. They put shirts in from Japan on the same theory, do they not?

Mr. WILLISTON. Yes. Any man who is in the importing business, and that was an association of importers not manufacturers, would naturally be averse to see any increase in duties. I think that is only natural, and I do not object to him for so testifying.

Senator BIBLE. I think his position is very clear.

Thank you, Mr. Williston. You may proceed.

Mr. WILLISTON. When the Trade Agreements Act was first passed, as I recall, one of the objectives was increased imports of raw materials. This objective has certainly been attained.

A second cause is the increased world metal productive capacity. Over the last 10 years the world's capacity to produce metals has been increased to provide for the reconstruction after World War II, the metal requirements of the Korean war, the postwar reconstruction, and the United States stockpiles. These stockpiles are now virtually filled and the productive capacity which supplied the material for these stockpiles is now excess productive capacity.

Third, much of this surplus capacity was financed by the United States taxpayer and was located in foreign countries. While it is most difficult to get meaningful figures for the expenditures abroad, it is quite clear that in excess of $1 billion was loaned or granted by the Export-Import Bank and other agencies of the Government directly for foreign metal production, or indirectly, such as for powerlines and railroads for those same industries. In addition, much, much more than $1 billion was paid for the procurement of foreign metals and minerals and the prices paid included in them funds sufficient for the complete amortization of these foreign mining enterprises.

Senator BIBLE. Is it not also true that as of the present time there are a number of outstanding foreign contracts for the purchase of tungsten, for example?

Mr. WILLISTON. Yes, many of them.

Senator BIBLE. And I believe for copper and possibly several other metals or minerals.

Mr. WILLISTON. Yes, there are several outstanding. Tungsten are probably the most publicized but there are many others. I do not wish to criticize in any way the purchase by the Government in 1951 and 1952 while we were in the Korean war, you might say, making important contracts. They finally received the market that followed. I sympathize with them because we needed the metal badly and they did their best to get it.

I do want to bring up that in addition to these high purchase contracts here we have something over $1 billion which was loaned directly by the Export-Import Bank for foreign mineral expansion.

Senator MALONE. Could I ask a question there?

Is it not a fact that if we had had any special legislation or an adequate tariff to make the difference in the effective labor cost and the taxes and cost of doing business here and the chief competing

country on tungsten and other metals that when the Second World War and Korean war came along we would not have been in that position?

Mr. WILLISTON. That is quite true.

Senator MALONE. Then we did it to ourselves.

Mr. WILLISTON. I think we did.

Senator MALONE. In other words, that is what we have done since 1934 with this special legislation allowing the Executive to trade a part or all of any industry for his foreign policy and allowing since 1947 Geneva now, the 26 nations sitting there, to divide our markets through multilateral trade agreements and, while they agree to lower tariffs on certain products of their own, they do not have to live up to their part of the bargain as long as they are short of dollar balance payments.

Mr. WILLISTON. That is true.

Senator MALONE. They do not live up to them, is that true?

Mr. WILLISTON. Yes.

Senator MALONE. So that when we ran out of legislation in the Malone-Aspinall Act you died; did you not?

Mr. WILLISTON. Yes.

Senator MALONE. You would not need special legislation if we would revert to the Constitution of the United States.

Mr. WILLISTON. If we would revert to the Constitution of the United States and the Congress would take over the making of tariffs and adjustments were made in tariffs in accordance with the depreciated dollar we would be in good shape.

Senator MALONE. Is not that always taken into consideration? In other words, since 1789, which was your first protective tariff as soon as they had the Constitution adopted for almost 150 years to 1934 the principle of the tariff was to make that difference in cost; was it not?

Mr. WILLISTON. That is right.

Senator MALONE. Then we reversed the field and started trading our industries off for a foreign policy. Sometimes the Congress in their committees fixed this tariff through what sometimes was an awkward procedure. Sometimes it might be too high. Sometimes it might be too low, but it was always adjusted. But in 1930 they transferred it to the Tariff Commission as an agent of Congress to do the job; did they not?

Mr. WILLISTON. That is right.

Senator MALONE. What does it say? Does it not say in so many words that if this is not renewed and it reverts that the Tariff Commission determines the difference in the cost of an article produced here and that article or a similar article produced in the chief competing foreign nation and recommends the difference as a tariff. Is that what it said?

Mr. WILLISTON. That is the 1930 Tariff Act. That is right.

Senator MALONE. Is that not the thing that takes over? We revert to the 1930 Tariff Act and the statutory tariffs at June 30 of this year if we do not renew the Reciprocal Trade Agreements Act.

Mr. WILLISTON. If the Reciprocal Trade Agreement Act is not extended there will be no more power.

Personally, I am not sure in my own mind whether these previous ones have the basis of treaties and would continue or not. I was a little uncertain of that.

Senator MALONE. I put them in the record this morning and I will point out a letter from the Tariff Commission. This is the clearest letter I have ever received from the Tariff Commission. It is very clear from this letter that after June 30 neither the State Department nor the Executive—but the State Department is the one that does it—can make any further bilateral treaties and that Geneva under the General Agreements on Tariff and Trade can make no further multilateral treaties and then, when the President serves 2 months' notice on each of the nations in the multilateral trade agreements who are party to it, they revert and, when he serves 6 months' notice on the nations party to the bilateral treaties, they revert. Then that means that everything reverts to the Tariff Commission on a basis of fair and reasonable competition as you have outlined and then the American workingmen and investors are back in business; are they not?

Mr. WILLISTON. That is right.

Senator MALONE. Now, there was a very interesting suggestion made this morning by Senator Barrett of Wyoming, which we have all discussed around here but which would not be pertinent until this expires. Then if there happened to be any product like sugar or any other product that did not seem to be adequately covered by simply a tariff the Senate Finance Committee and the Ways and Means Committee of the House can take them up and they can make any special deal they want to make, can they, just as they can on sugar?

Mr. WILLISTON. Yes.

Senator MALONE. That kind of a deal is not pertinent until this thing expires.

Mr. WILLISTON. That is true.

Senator MALONE. So that it is so clear. Many people say you do not want to revert to logrolling tactics, but Congress itself took care of that better than the Tariff Commission.

I have had a bill in here for 7 or 8 years, S. 34 that only deals with critical minerals and metals. S. 28 deals with all of the 5,000 products and what it would do here would be merely amend the 1930 act to give the Tariff Commission a little more power, to take the lid off 50 percent up or down and let them go to whatever is necessary and also adjust for the manipulation of money in terms of the dollar by other nations and subsidize and dumping, to let them invoke the stopping of imports in any way they want to do it; in other words, turn it all over to the Tariff Commission.

However, you do not need this bill at all, in my opinion, if you let this expire.

Then if a weakness develops so that they do not have quite enough power you can put an amendment through Congress without any trouble at all.

The thing that just tears me apart is knowing that probably 98 percent of the people west of the Potomac River are against all of this stuff going on here but they are so bewildered by the Members of Congress voting as they do that they will sit at this table or at the Senate Finance Committee and say, "We only want half of our market. We want to take care of everybody else in the world first," and every other

nation in the world has all of their market and part of ours because they do not live up to these agreements.

I think Congress is getting wise to this thing and you are going to find a lot of the Members lining up if the people of this Nation will be themselves, when they come here and when they write letters and do not suggest that we give it away.

You are giving the American heritage away.

Mr. WILLISTON. Senator, I think one of the reasons that there has been as little opposition to the Trade Act, not Reciprocal Trade Act——

Senator MALONE. There is no reciprocity.

Mr. WILLISTON. I caught myself in time. That is the fact that we had a very bare beginning in the late thirties. Then we had World War II and the post World War II reconstruction period and the Korean war and the reconstruction period after that, and it is now that the full impact of that trade act is beginning to take place.

Senator MALONE. In other words, we are living on a war economy and what we need is a war to pull us out of it?

Mr. WILLISTON. I hope not.

Senator MALONE. I hope not, but except for the Second World War in 1941 and Korea in 1951, we would have had what we are having now. Do you agree?

Mr. WILLISTON. That is true.

Senator BIBLE. Mr. Williston, you may continue your statement.

Mr. WILLISTON. Fourth, internal inflation has likewise had its toll. In 20 years hourly labor costs within the United States, insofar as metal mining is concerned, have risen from levels of approximately 60 cents, including fringes, to $2.60, including fringes, while labor efficiency, even with the utmost of mechanization has barely held its own in underground mines. If we were to evaluate the cost of sweat, what little available information we have would indicate that the cost of a drop of perspiration in the mining industry is now 7 times what it was 20 years ago.

The fifth contributing factor is the failure to strengthen our monetary system through revaluation of gold. An American citizen cannot obtain gold; the only currency available to him is paper currency, which, in most cases, will buy roughly one-third of what it would 20 years ago.

Before either the administration or the Congress should consider whether a domestic mining industry is worth keeping it has to be made quite plain to them that the industry justifies its existence.

There are two main reasons which should be given—one, the defense aspect, and the other is the economic value of the industry to western segments of the American economy.

Senator MALONE. At this point, Mr. Chairman, if we might emphasize that we have allowed in the last 25 years the impression here and it has been gained no doubt over the country that in order to survive an industry's supporters must prove that it is valuable for national defense; just the economic structure of this country has not been enough; is that right?

Mr. WILLISTON. Those are two principal reasons. There are more, of course.

Senator MALONE. I say that in order to survive and not be traded down the river here you have to prove it is important for national defense.

Mr. WILLISTON. That is right.

Senator BIBLE. In the first place, we never should be put in that position. Do you agree?

Mr. WILLISTON. That is true. It is unfortunate that we were placed in that position.

Senator BIBLE. That is the fault of Congress, in my opinion.

Mr. WILLISTON. That is one reason why I think it is very important to bring out the economic importance to the survival of the West to have the mining industry.

Senator MALONE. The textile and 500 industries are important to every community of the United States.

Mr. WILLISTON. Yes.

Senator MALONE. Why not get a policy? Why not let this thing expire and not talk about giving away any of our markets at all and have equal access with any foreigner to our American markets so that the people here, when they invest their money, only have to determine whether or not they can compete with other Americans paying the same wages and taxes and everything else not with Siam or Korea or Scotland or some other seaport. Do you agree?

Mr. WILLISTON. That is right.

Much has been said about the defense importance of mining, possibly too much, but it must be quite clear to everyone that if the United States is in a cold war for survival and feels that the minimum amount that can be safely spent for the security of the country is some $40 billion a year, then certainly it is most important that the industry that supplies the metals for the munitions of war must be preserved if the country is to be maintained. Recent statements of Adm. Hyman Rickover, the atomic submarine expert, would seem to indicate that no metals or minerals from overseas sources will be available in the next major emergency. African, European, Asian, and even South American sources will likely be of no value to us at such a time, and probably no North American source would be of much value unless it was in being or capable of almost immediate expansion. The times are past when a 5-year delay in a lead time is at all permissible.

The second basic importance of the metal industry lies with the economic welfare of the Western States. There are two principal products of the western mining States on which their overall economy rests. There are agriculture, including forest products, and mining. There are three additional sources of outside income for these States—Federal expenditures, gambling, and tourists, but I think there would be general agreement that if the future welfare of the West depended on governmental largess, and the whims of gamblers and tourists are to be the basis of their economy, they could well expect a rather hectic and uncertain future.

Agriculture and minerals provide the dollars with which the Western States buy the manufactured products of the East. It is the circulation of these dollars within the States that allow the service industries to survive. It is by taxing the agriculture and mining dollars, and then these dollars again, as they circulate among the service

industries, that provide the State and county governments revenue.

Certainly, if the mining dollar is to disappear, agriculture cannot stand higher tax rates to maintain the present economic levels. What these Western States need is what the foreign governments have so long asked for and gotten—trade, not aid. If the industries of the East do not want to buy the metals and minerals of the West they can count on drastically declining markets for their manufactured goods in those States.

Senator MALONE. That "trade, not aid" was invented by a Prime Minister of England in 1952 or some place in there. I visited him when I was over there and he indicated that no one would ask America to sign anything that was not good for her and England was not going to sign anything that would restrict her production.

We have trade and aid both with us today.

Mr. WILLISTON. Except for the Western States. It is neither trade nor aid.

Senator MALONE. You are in the United States. You could not expect it.

Mr. WILLISTON. That is true.

National minerals policy: The first question arises, do we have a national minerals policy, and the proper answer to that question is that we seem to have two. First, we have the policy as expressed by the President which calls for a "healthy domestic mineral industry," and then we have a second policy, not expressed in words but in the actions of the State and Commerce Departments which lead one to believe that the problems of domestic nonferrous and strategic metals producers play a secondary role in consideration of some of our foreign policies.

The question arises as to why this conflict between stated policy and actual policy. I think the easiest explanation is one of divided authority. It was not so many years ago that it was ascertained that there were 32 different Federal agencies with their fingers in the mineral pie. I think there are probably a few less at the present time.

But anyone who knows Government agencies knows that any such division of authority would assure that no positive steps would ever be taken. It is most difficult to even get 2 Federal agencies to agree on any 1 suggestion, and when the problem arises of getting 32 agencies to agree on all of the details of a program covering many different metals it is quite plain that no results could ever be expected.

There is a second reason. In the State Department our diplomats are interested in trying to do their own job well and they leave to other administrative agencies domestic problems. Apparently the easiest thing for them to trade away in the interest of our foreign relations is the mineral industry. No other agency in the Government has seen fit, or has been strong enough to offset the State Department's efforts. When you realize that there are few appointees in high policymaking places who are intimately familiar with metals or minerals and their problems, it is relatively easy to see why the industry has come off second best.

While there are many capable mining people in the Geological Survey and in the Bureau of Mines they are given only a minor voice in policymaking, and this is not a recent condition. So far as I know, except for actual war years, there has been no change in my 20 years' connection with the mining industry.

What is required to implement our national minerals policy: If we are to have a healthy domestic mineral industry we must provide a certain part of the United States market for the domestic producer and we must assure him that he will be able to sell his product at a price which will return his costs, cover the costs of additional exploration and development, and return a profit commensurate with the risk. It has been suggested that we should procure all our metals and minerals from available domestic sources. At the present time this is flatly impossible to do. It would take years for the mining industry to do the necessary exploration and development to recover that portion of the United States market already lost to foreign producers. The cost would be high and the objection of consumers to the higher cost would be such that would make this goal almost impossible of attainment.

On the other hand, if we allow the portion of the market given to the American producer to decline so that the foreigners had three-fourths of the market, the value of the industry, both for defense purposes and for the economic welfare of the Western States, would be too small to be effective.

A reasonable answer would, I believe, be the setting of a goal for the domestic industry equal to the present percentage of the market, or to the percentage of the market which they were able to supply in relatively recent years, say 4 or 5, whichever is greater. We are thus, in effect, telling the foreign producers that, while we have granted to them a very large part of the United States market, we cannot afford, on the basis of the security of the United States and the countries of the free world, to become more dependent on foreign sources which would be unavailable in times of emergency.

Senator BIBLE. How would that sharing of the market work, on a case-by-case basis, in the minerals involved?

Mr. WILLISTON. I feel on this policy basis that, first, you should set up what you would like to do in words and then try to work out the details as you have asked the details in that particular case. I will come to that later.

Senator BIBLE. You develop that later on?

Mr. WILLISTON. Yes.

Senator BIBLE. All right.

Senator MALONE. May I interpose there? When this special legislation was in force, we were producing nearly twice as much tungsten as the rate at which we used it in this country.

Mr. WILLISTON. That is right.

Senator MALONE. All we tried to do was fix a price for the seven minerals, including tungsten, and make the difference of effective labor cost and taxes and cost of doing business in the United States and the chief competing country; is that right?

Mr. WILLISTON. That is right.

Senator MALONE. I see that you are suggesting that they might get a part of our market. We do not have any part of any other nation's market.

Mr. WILLISTON. That is true.

Senator MALONE. They do not need a tariff or duty or tax to make the difference in labor or cost of doing business, because it is so much smaller than ours to start with. They have it for another purpose, and

the one purpose of keeping us out of there. Then what obligation do we have to give them a part of our market?

Mr. WILLISTON. There is no obligation. We have done it. I do not think we would be able to get it back for a good many years.

Senator MALONE. As a matter of fact, when this expires and the proper notice is given these nations, it reverts to the Tariff Commission and you are in business, are you not?

Mr. WILLISTON. Yes; we are in business.

Senator MALONE. Then why do you say many years?

Mr. WILLISTON. The point is that the present productive capacity of the United States is not large enough to take care of all of our copper requirements right now.

Senator MALONE. It never was.

Mr. WILLISTON. In 1938, it was. We supplied 100 percent of our copper, lead, and zinc requirements and were on an export basis.

Senator MALONE. That is right, but not in all of the minerals.

Mr. WILLISTON. Oh, not all.

Senator MALONE. Let us get at it this way: Under the 1930 law, the Tariff Commission is charged to keep the duty flexible and charged to keep abreast of that particular provision of the difference in cost. If they do that, the market takes care of itself. In other words, in the years ahead, under a principle established by Congress, you know that you are not going to find something in 3 or 4 years and then spend your money and not be able to sell it, because you know the conditions under which you are selling to compete with Americans. Each industry then would grow in accordance with the protection that it has.

Mr. WILLISTON. Yes.

Senator MALONE. And the facts are, then, and this is what I believe and I have always believed, that it is not a subsidy to an industry to have the difference in the effective labor costs and costs of doing business here and the chief competing nation represented by the duty or tariff. If you think you have to go above that for national defense or something of that nature, that is subject to special legislation, but the principle laid down to have that difference represented is not a subsidy and would be there automatically under the 1930 law. That is the thing you believe, is it not?

Mr. WILLISTON. Yes, fundamentally. The next question arises as to how can assurance of the market at, roughly, the present volume or only slightly higher be assured to the mining industry. There are only two ways in which this can be done. One is by import control, either by quotas, tariffs, or excise taxes. The second possibility is by subsidies. There is no question but what import control would do the job, and there is very considerable question whether a subsidy, as ordinarily construed, could attain the desired objective.

Senator MALONE. The objection to that is just what happened to tungsten. You have to have an appropriation.

Mr. WILLISTON. Yes. That is what I say here. Subsidies are paid out of the taxpayers' money, and the Congress must appropriate the necessary funds. No Congress can bind a future Congress, so, under the ordinary construction of a subsidy, whether it be called a subsidy or called an unnecessary stockpile, there is no assurance that any such policy could last longer than the congressional appropriations.

It is quite apparent that no industry can be healthy and no industry can be long lived if it must depend on annual appropriations of Congress for its future. There is only one type of subsidy which might have the necessary continuity, and that is the type followed in the present wool-subsidy program or in the sugar-quota program.

Senator MALONE. If you have a subsidy program, you have to renew it every so often. The sugar subsidy has to be renewed and, if we do not get the wool subsidy renewed in April, they will not bring the sheep out of the mountains.

Mr. WILLISTON. I did not say this was good. I said it was better.

Senator MALONE. We have to get it renewed, but if enough people get angry about it you will not.

Mr. WILLISTON. There is just one type of subsidy which might have the necessary continuity, and that is the type followed in the present wool subsidy program, and which for many years has been applied to agriculture, where the tariff receipts on the importation of foreign materials were used to maintain an industry within the United States. It is not at all the most desirable type of answer for this problem, but it does have some apparent advantages over other types of subsidy payments, among those being the fact that the State Department can hardly object to it since it does not involve a material increase in duties.

The Treasury Department cannot object to it strenuously because, at the present time, if my memory serves me correctly, most of the taxes received go to the Agriculture Department and not to the Treasury itself. That is, under that section of the Agricultural Act.

Senator MALONE. At that point I think it is well to point out that the Constitution of the United States separates the regulation of the national economy from the fixing of foreign policy, putting the first under the legislative branch and the second under the executive branch. What we have done is to tie the two together without amending the Constitution of the United States. The State Deparment should have nothing to do with the regulation of the national economy.

Mr. WILLISTON. That is right. Agriculture cannot object, because this is only a very small drop in the bucket compared to the subsidies agriculture receives from the Government. The consumer cannot object to it, because it does not materially increase the price he pays for the products.

Senator MALONE. At that point, is it not a fact that history shows that, when the foreign imports cut down materially or do way with the domesic industry, then they take what the traffic will bear and the consumer does not profit anyway?

Mr. WILLISTON. No; he does not profit.

Senator MALONE. That is a fallacy.

Mr. WILLISTON. If I were to be so bold as to propose a national minerals policy I would suggest the following: That those nonferrous or strategic minerals which are now or have, within recent years, been produced in excess of 15 or 20 percent of the United States consumption be given excise tax, tariff, or quota protection so as to maintain their level of production either at the current percentage of the market or the highest levels of the last 4 years, whichever is higher.

As to those strategic metals and minerals where production is less than 15 or 20 percent of present United States consumption, a 10 percent duty could be applied and the money received from tariff receipts utilized to maintain the domestic industry of the same metal, with the subsidy to decline in amount as domestic production increased, and to increase in amount as domestic production declined, but the subsidy never to exceed the amount of money received on the imports of the foreign mineral or metal.

Such a mineral policy, if adopted by the Congress and approved by the President, would do the job, so far as I can tell. It does not involve tariffs anywhere near as high as they were 20 years ago percentagewise, and these tariffs, if increased, would, in most cases, go to the United States Treasury and increase the Government's income. Only in the case of the minor metals would the tariff receipts be used as a source of income to maintain the minor exotic metals.

Now, I do not feel that that is at all the most desirable way to do it. The reason that I have put it up that way is the fact that it receives less legislative opposition from the East which is not particularly interested in the program and it might be easier to accomplish from the legislative point of view.

It is a sacrifice of true policy for the sake of expediency, I must confess.

Senator MALONE. Is it not a fact that these minor metals that you speak of as minor—at least of minor production, such as nickel and several other like metals—that we have never had a tariff or duty on them?

Mr. WILLISTON. That is true.

Senator MALONE. Is it not a fact also that there has never been any duty or tariff on any product out of the 5,000 listed when we did not show signs of commercial production?

Mr. WILLISTON. Put a tariff on and we will produce.

Senator MALONE. As a matter of fact, over many years 60 percent of our imports in dollar value never had a tariff simply because either it did not need it or we were not in commercial production. The Tariff Commission saw to that until we took away their authority.

Mr. WILLISTON. Naturally, there will be some people who will oppose this policy. However, I do not see how foreign producers can honestly complain about this type of policy. We have granted them roughly half our markets for many domestically produced metals and minerals, and I think it can be plainly stated that, if they think they are entitled to more than half the market, they are just plain greedy and deserve little consideration from either the Congress or from the administration.

Senator MALONE. Especially in view of the fact that they show us no consideration whatever.

Mr. WILLISTON. That is right, sir.

It is quite possible that other policies will be submitted to this committee as an answer to the present mining situation. It is my candid opinion that some of these, at least, will be presented in an effort to confuse and cause division in the industry. Among them it might be suggested that further and larger expenditures under the Defense Minerals Exploration Administration are the sole solution to industry's problems. I think the answer to this is that, if it is not

possible for us to operate the mines we have, it is not proper to encourage exploration for further mines which, likewise, will not be able to compete.

On the other hand, exploration programs, of course, should be part of a national minerals policy, but alone they cannot achieve the objective of a sound, going domestic mining industry.

Senator MALONE. You have been in the active mining business. Is it not a fact that, if it is either a fixed price or a tariff or duty to make that difference that we have already explained there as a principle of Congress, there is no need for Government money to go into exploration.

Mr. WILLISTON. That is true.

Senator MALONE. Individuals and mining companies do the exploration.

Mr. WILLISTON. That is true.

Senator MALONE. Government never finds anything, does it? It is the companies and individuals who find it when it is profitable to find it.

Mr. WILLISTON. That is right.

Senator MALONE. The reason we do not have exploration going on now in many fields is because if you find it you cannot sell it so there is no reason to spend taxpayers' money on exploration.

Mr. WILLISTON. Certainly you cannot base a domestic industry on Government assistance for looking for an ore if you cannot sell it if you find it.

Senator MALONE. Government men are not working for the Government if they know how to do it.

Mr. WILLISTON. I think probably the suggestion of extensive research can only confuse the issue. If the research is use research to expand the consumption of metals then it might help on a short-term basis only. On the other hand, if the proposed research has to do with reducing costs of mining, then I want to call to the attention of the committee the fact that it is equally available to the foreigner and, if we could develop a way to mine at half our present costs, the foreigners would adopt the same procedure and we would be in the same position that we are in at present.

Unquestionably stockpiling will be suggested. The taxpayer of the United States cannot go on forever buying domestic metals and putting them away for future use under the guise of defense. Sooner or later it must stop. So, all that any stockpiling program can be is a stopgap program to use until a sound policy can be adopted.

Barter falls in the same category. It is the transferring of surplus agricultural products to obtain surplus mineral products and, in effect, rob the domestic producer of part of his natural market. At the same time it tends to increase world production. It is, in my opinion, a good deal like opium—it gives a very pleasant sensation while it lasts but it leads to catastrophe when it ceases.

Senator BIBLE. In that connection, Mr. Williston, I would be interested in your comment on the bartering program insofar as it involved lead and zinc. The bill was before the Congress just a few days ago. It was passed. The mineral feature of it was defeated. It was pointed out there that during the time that the barter program was in effect, the result of the program was to siphon off a surplus of lead and

zinc from foreign producers, freeze it in a stockpile, and as a result stabilize the world market.

It was then pointed out that just as soon as the barter program was abandoned the world market on lead and zinc broke and it is at the low point that it is today.

Mr. WILLISTON. That is right.

Senator BIBLE. Proponents of the program argued that if the barter program was to be continued and substitute perishable agricultural commodities for nonperishable mineral commodities you would stabilize the world market.

Would you care to comment on that?

Mr. WILLISTON. Gladly. If you barter unlimited amounts of agricultural products at relatively high world prices for foreign metals, you are providing a high market for the foreign producer. You are going to encourage the foreign producer to enlarge his plant, increase his production.

He has an unlimited market for his materials. He builds the level of world production higher and higher and higher, and you use more and more agricultural products, and barter them for surplus metals, and bring them to the United States. That is fine as long as it continues.

Senator BIBLE. With the understanding that the mineral commodities are frozen.

Mr. WILLISTON. Yes, but there are two other points.

First, can you keep it up forever, because that is what you would have to do on ever-increasing levels? If you ever stopped, the longer you have had it the worse off you will be.

There is another point. The Commodity Credit Corporation takes these minerals in and brings them into this country in exchange for their surplus wheat. They will then attempt to turn them over to the stockpile. If they turn them over to the stockpiles, then they have to get from the Defense Department the dollars to recoup the Commodity Credit Corporation, and the Defense Department then has to come to the Congress and ask for additional defense funds to pay for those metals.

If they go into the supplementary stockpiles or stay in the Commodity Credit Corporation, then the Commodity Credit Corporation has to come to the Congress and ask for the appropriation in dollars for those metals so all you do is to swap surplus agriculture for foreign metals and then the Congress has to repay the administrative agency that did the job and you might just as well have done it in the first place.

Senator BIBLE. I am very interested in your comment because, as you know, one of the first proponents of this bartering program was the former Under Secretary of the Interior in Charge of Mining.

Mr. WILLISTON. I know that.

Senator BIBLE. In addition, within the last 2 or 3 days, one of the biggest mineral producers in the United States was suggesting that in his particular commodity a bartering program would be a very fine thing to siphon off the world surplus and stabilize the world market.

You do not think it will have that effect?

Mr. WILLISTON. I do not believe you can build a long-term program on it because I do not think that the Congress will continue to appropriate the money to replace the funds in the Commodity Credit Corporation. In other words, it still boils down to a stockpiling program where you again have to appropriate the funds and sooner or later you are going to stop.

Senator BIBLE. I might ask one further question.

I think that the Western Governors Conference in the resolution presented this morning by Governor Russell of Nevada did a very able job. I think and I know that you had a large part in that particular conference. I think it was a splendid resolution showing unanimity of action and a suggested course to try to be of help to the mining industry.

Did the Western Conference take any position on this bartering program?

Mr. WILLISTON. Not in Colorado Springs but they did in Reno. There was considerable discussion at the Reno meeting and the feeling was this: that a barter program is very helpful for a stopgap program until a long-term program can be evolved but it is not a solution to the long term program of the mining industry and the bulk of the mining industry was very definitely of that opinion. Only 1 or 2 of some of the companies that had large excess smelter capacity were enthusiastic about the barter program.

Senator BIBLE. I am happy to get those views because I think, as I said this morning, that the unanimity from the Western States is refreshing. I do not know that there is the same unanimity in the mining industry but the more of these points that can be resolved the more helpful we, as a committee, can be here.

As you point out in this very able statement of yours, the thing that has constantly bothered me is just exactly what can this Interior Committee as a committee do. We cannot write the tax legislation. We cannot write import quota legislation. We cannot write legislation along that line.

Mr. WILLISTON. That is true.

Senator BIBLE. If you eliminate stockpiling what suggestion for a course of action would you make for this committee?

Mr. WILLISTON. I would say that these particular hearings were called to develop a national minerals program. I think industry has tried to do its best to bring in the minimum requirements that would be necessary, the simplest and the best. I realize that many of the things, most of the things suggested are beyond the capacity of this committee to initiate but I have felt this way: The members of this committee know more about mining and mining problems, they know more about the conditions of the West than any other committee in the Senate. They are therefore the natural people to develop an overall program. If, after that program is developed they find out that it is beyond the capacity of this committee to institute the legislation then, personally, I pray and hope that they will make that report and take it to the committee which has the primary interest in this, the ability to initiate such legislation, and tell that committee, "We have spent a good deal of time to develop this program. We feel it is the best that can be accomplished. It is out of our bailiwick. We are bringing it to you with the earnest recommendation that you will do your best to accomplish it for us."

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Senator BIBLE. You are an industry spokesman. You are an industry man. Do you feel that the industry itself is well united on the program that you presented this morning?

Mr. WILLISTON. I think it is becoming more and more united. I know that all of the minor metals are not coming back here and telling you what they want. They are perfectly willing to come and say, "This is the minimum we can get by with and we hope we will be able to get that." They are hurt too badly to fight among themselves any longer. Even the copper, lead and zinc industries who have been well enough off to afford the luxury of fighting among themselves no longer can enjoy that luxury.

I think you are finding that they are more and more united all the the time.

Senator BIBLE. Do you believe that some of these vast mining companies that have tremendous foreign holdings are willing to recognize the priority of treatment on American production?

Mr. WILLISTON. I think they are. It is rather easy to see where a company with extensive foreign holdings might be inclined to favor their foreign holdings a little bit but, when they realize that the tremendous cost of closing domestic mines would far more than siphon off any profits from their foreign things, it is just a case of dollars and cents. They have to keep domestic mines going as well as their foreign mines.

Senator BIBLE. Has this theory espoused in the Governors' resolution of a certain percentage of the domestic market being kept for the domestic producer been explored with the major producers in metals?

Mr. WILLISTON. No, but I would not contemplate that there would be anything other than an equitable answer to it.

We have copper production in this country and there is copper production abroad. A proper balance between the two should be quite satisfactory. I do not think that there is going to be too much trouble in working out something like that as long as the price of copper is down between 20 and 25 cents a pound. They have no choice but to go along.

Senator BIBLE. Do you believe the same thing is true of the lead and zinc industry?

Mr. WILLISTON. Well, there are a great many more members in the lead and zinc industry than in the copper industry and there are some very, very rugged individualists. I doubt if you would ever get unanimous consent to anything in the lead and zinc industry but I think you can find a vast preponderance of opinion.

Senator BIBLE. I think the lead and zinc industry are closer together than in many, many years.

Mr. WILLISTON. I think since about 1932 at the bottom of the depression. I imagine they would have been unified at that time.

Senator BIBLE. Thank you.

Senator MALONE. Mr. Chairman?

Senator BIBLE. Yes.

Senator MALONE. As a matter of fact, there are none of them in business to amount to anything now.

Mr. WILLISTON. Yes, a good many of them are struggling along. They are not making money but it costs them more to shut down than to try to keep going. They are down to the four day week and the

partial stop-and-go operations and things like that but they are in that very difficult position.

Senator MALONE. So that the workingman cannot make a living either and the reason they are trying to hang on to their investment is to hope for some legislation to keep them going.

Mr. WILLISTON. That is right. Miners are optimists or they would have been out of the business long ago. I think they should have been, myself.

Senator MALONE. Mining is a disease and only for that we probably would not be in business at all. Now there is a combination that have worked together, this committee and the Senate Finance Committee, and I am a member of both. We made two reports on the Western Hemisphere on self-sufficiency, that we can be self-sufficient in the Western Hemisphere without any doubt. When that report was ready, Senate Report 1627 of the 83d Congress, I was a member of the Senate Finance Committee and in 1954 we were rearranging the tax bill so that I suggested on, I think, 26 metals, nearly all of the metals and minerals, that we raise the depletion allowance from 15 percent to 23 percent. You recall that.

Mr. WILLISTON. Yes, that was very hopeful.

Senator MALONE. The chairman was Senator George, of Georgia, who was very reasonable about it. He said, "Suppose we have our research staff get together with Malone's research staff"—as he put it—"and bring back a report." There was no argument.

I think we could have included gold and silver and copper. No one was agitating it. It had not been suggested for many, many years. I pulled it out of a clear sky and thought it would help. That is an example of cooperation.

You say that we cannot initiate such legislation. We have a bill before us. It was assigned to this committee because it is a critical minerals bill. What it provides is to exactly return to the 1930 Tariff Act and to amend the 1930 Tariff Act and give the Tariff Commission authority over metals. We name them. It was assigned to this committee. A like bill that would be a regular tariff bill and include all products in the United States was assigned to the Senate Finance Committee. This bill is before us. That, Mr. Chairman, is the bill I would like to see considered along with any special legislation because it is all you would need and does exactly what you are suggesting, not that we give half of the market away or a third or any part of it but give Americans equal access to their own market at least.

Mr. WILLISTON. It would be very nice if we could attain that objective.

Senator MALONE. You may have the copy and may have some suggestions.

Mr. WILLISTON. It would appear to me that unless the present Congress and the present administration takes some action to assure a truly adequate national minerals policy the kindest thing they could do would be to tell the industry the truth—to tell them frankly that nothing will be done, and advise them to struggle along as best they can or to get out of the United States while they are still solvent. They could then do as many of our larger manufacturers have done, put in plants abroad, produce with the advantages of cheap labor,

ship into the United States over the low-tariff barriers, and enjoy the United States market without the problems of United States costs and United States taxes. They should likewise tell the Western States that the future welfare of the West is of no importance to the East and that trade with foreign nations is more important than trade with the Western United States.

The present problems in the mining industry have been coming on over a period of at least 4 years, and the Western Governors Mining Advisory Council predicted the present situation as a probability in 1955 and as a certainty in April of 1957.

The situation in mining is not because of the present recession—it is, in my opinion, one of the causes of the present recession. Other industries in the United States now face the same problems that mining has had for some time. On the west coast, foreign autos, made by American companies abroad, are selling well while domestic sales languish; foreign steel has taken over 25 percent of the west coast market. Certain commodities, such as textiles, plywood, figs, nuts, tuna fish, machine tools, large electric generators, bicycles, sewing machines, optical instruments, business machines and many, many other manufactured products, are now beginning to feel what the mining industry has felt for several years.

With internal inflation and the cheap dollar for our citizens, with gold valued at $35 an ounce available to foreigners, we can expect more and more imports and less and less exports. Thus, you might say we have the alternative of increasing import controls, of revaluing gold (now voluntarily or later involuntarily) or having a good first-class depression.

I should correct that paper and strike out the words "now voluntarily," because I do not believe we can voluntarily reduce the amount of gold in the dollar.

Senator BIBLE. Thank you very much, Mr. Williston. I think that is a very able and hard-hitting and splendid statement of the status of the mining industry.

I think it points out some concrete suggestions. I think you are to be very greatly complimented on it. I think you have done a splendid job.

I would like to ask you two questions relative to this mine assessment problem. You are aware, I am sure, that there is a bill pending before this committee providing for the suspension of annual assessment work for this year?

Mr. WILLISTON. I am familiar with that bill.

Senator BIBLE. There is also another bill introduced by Senator Church to require the annual assessment work to run from August 15, which he has amended to run to October 1 rather than the present July 1. May I have your comment on both bills?

Mr. WILLISTON. In regard to the change in assessment date, it is now, of course, July 1. In many parts of the West where it is high, snow is not off by the 1st of July, and you cannot get in in time to get your assessment work done. I think that the idea of a postponing in the year is a very good one. Actually, personally, I feel his August 15 date was better than his October 1 date.

Many mining companies double up on their assessment work. In other words, they will go in in the last month prior to the date and get 1 year's assessment in and then, without taking their equipment or

their men out, stay over the termination date and do it again. They get more work for their money and get more assessment work for the necessary dollars expended. It is a much more efficient way of doing it. With the July date you cannot always do it. With the August 15 date there is no doubt that you could, August 15 or September 1. When you get to the October 1 date you can get in the part before but are you sure that you will be able to work through the 1st of November?

If I could make a suggestion on that I would say change the date to either August 15 or September 1 rather than all the way to October 1.

Senator BIBLE. You think September 1 is a preferable date to either August 15 or October 1?

Mr. WILLISTON. I personally would feel so and I think most operators would. I cannot commit anyone else.

Senator BIBLE. I am just soliciting your views as an active operator. What is your thinking as to a moratorium on assessment?

Mr. WILLISTON. If this recession that we are running into is a depression and not a recession which it may well be, then I think that there is every good reasonable reason for a moratorium on assessment work but there is one drawback to the previous moratoriums we have had in the past. They were granted in times of an emergency, you might say, a serious decline, a serious reason for it, and then they were continued after the thing was over year after year. That I am opposed to. I am very much opposed to that.

If this is a serious situation then I would say, yes.

Senator BIBLE. I take it from everything we have heard in the last week that at least miningwise it is a serious situation.

Mr. WILLISTON. Yes, but I would regret immeasurably to see a habit of continuing these moratoriums because this is one of the things that happens. Speculators will come in knowing they do not have to do the assessment work and take up big blocks of claims and tie them up and nobody else can do any prospecting and they won't do anything on them.

The other point is that if it goes on for 5 or 6 years as in the past, you no longer can find the owner of the claims if you ever do want to do business with the owner. He may have changed his address a half dozen times. You have no particular record of him and it makes it almost impossible for a legitimate mining company to go in and develop the claims they may have.

There was a suggestion this morning that maybe a limitation on the number of claims would be advisable.

Senator BIBLE. That has been suggested.

Mr. WILLISTON. That would cut out the speculative angle and be helpful and still protect the true small miner.

Senator BIBLE. I introduced a bill and it was with the thought in mind of helping the small miner who is having particular difficulties right now. I am rather inclined to think that there might be some realistic limit put on of 10 or 20 claims.

I got the impression from Senator Bartlett that he felt that a limitation of five claims was too small a limitation. That was a suggestion made.

Would you have any suggestion as to the number of claims that should be exempt?

Mr. WILLISTON. I would say that the limitation should be as low as Senator Bartlett would consider covered his own problem.

Senator BIBLE. Something in the neighborhood of 10 or 20 claims.

Mr. WILLISTON. If he would say 10 to 20, I would certainly go for 10 or 15. I would hate to see it go as high or much higher than 20. There was one thing that the senior Senator from Wyoming spoke of this morning: That was that sugar quota plan. The wording of the Governors' recommendation is broad enough so that it covers that particular plan and for any metal which is produced in this country at rates of 40 percent or lower there is no doubt that that plan would be effective. When you get above 50 percent it is much more difficult to make it an operative procedure. It might be used there but I could definitely recommend it for anything below 50 percent. I doubt if much could be worked out to hold above 50 percent but it is a very excellent suggestion.

The thought that has been suggested in the past that it would be tariff receipts allocated to help the particular metal: This is a quota plus tariff receipts actually and is even stronger than the other program.

There is one thing I have here which Mr. Dole did not introduce although it is a letter to him which I thought might interest the committee. It is from the United States Bureau of Mines and it states that the metallic mineral production in the 11 Western States was valued at $977 million in 1957 compared with $1,300 million in 1956. Now, this is a 25 percent decline in metallic production in the Western States. Overall in the United States there was only an 11 percent decline so that all of the drop was in the Western States while the Eastern States increased somewhat. Now, with a 25 percent decline for the overall year of 1957 prices in the mining industry declining rapidly during the year and if it averaged up at a 25 percent decline, my personal feeling is that near the end of the year it was probably much closer to a 33⅓ percent decline, so we are starting the year 1958 down 33⅓ percent and still going so that it may well be that before the end of the year we will get to the 50 percent or pass the 50 percent.

Senator BIBLE. May I ask one further question? I know of your interest in mercury. Has there been testimony in this hearing concerning mercury?

Mr. REDWINE. Yes.

Senator BIBLE. Is there any need of amplifying that? Has it been adequately covered?

Mr. WILLISTON. I think it has been very adequately covered. Mr. Hyde Lewis, president of the largest and oldest producer in the country, testified yesterday.

Mr. REDWINE. That is correct.

Senator BIBLE. Senator Malone, I ask you to preside. I am running 30 minutes late on another commitment that I had. I think we have one more witness. This hearing will be recessed rather than adjourned because it will not be completed today. The record will be kept open.

I do not think we will have any further recessed hearing until after Easter vacation. I understand the Secretary is to come on April 28.

Would you mind proceeding along that line? You probably have some questions of Mr. Williston.

Mr. WILLISTON. Thank you ever so much, Senator.

Senator BIBLE. I think you made a very credible witness.

Mr. WILLISTON. Thank you.

Senator MALONE (presiding). I hand you a copy of the letter from the Tariff Commission which outlines exactly what happens if this 1934 Trade Agreements Act is not renewed, and we return to Public Law 361 on the principle of fair and reasonable competition.

Now, if any such an adjustment is taken up by Congress of metals or calico or anything else on the basis of the sugar regulation or the wool regulation, that is done entirely by Congress, is it not?

Mr. WILLISTON. I am not too sure of where things have to start.

Senator MALONE. I want to assure you that it is done by Congress.

Mr. WILLISTON. Might I ask you one thing, Senator? I know I am not supposed to ask Senators questions.

Senator MALONE. You ask anything you want to ask.

Mr. WILLISTON. Could you tell me whether the sugar plan and the wool plan were initiated in the Agricultural Committee of the House or Senate or did they originate in the House Ways and Means or Senate Finance Committes?

Senator MALONE. They originated in the House Ways and Means Committee, I think, although a considerable time has elapsed since the first sugar plan and I cannot answer that exactly. It could have been a suggestion from the Department of Agriculture. I think it was a suggestion of the sugar producers directly to the Senate Finance Committee, and the Ways and Means Committee of the House.

Mr. WILLISTON. I have often wondered because sometimes Agriculture feels they can do things.

Senator MALONE. It has only been recently that they felt they knew everything and as you know it has only been since 1934 that the Department of State has ever had anything to do with regulating the economy of this Nation. That was through the 1934 Trade Agreements Act.

Secretary Acheson and his assistant testified before the Senate Finance Committee that it is hardly possible, Acheson says, to separate the economic structure regulation from the foreign policy, meaning that the State Department could do a better job if they could trade the production for its treaties and agreements.

Mr. WILLISTON. I mentioned that they had done a very successful job from their point of view.

Senator MALONE. They have done a very good hatchet job on the industries of the United States not confined to mining at all. Now then, I can tell you that it is the Senate Finance Committee and the Ways and Means Committee of the House that handle the sugar and wool and will other special legislation, so that if this 1934 Trade Agreements Act is not renewed, referred to in some circles as reciprocal trade, which is not reciprocal at all, as you well know, and is a one-sided thing, simply a division of our markets, if that expires no more agreements can be made and then under certain notice given by the President all of its multilateral and bilateral trade agreements revert to the Tariff Commission, an agent of Congress. Then they proceed on the difference of cost of production. Now then, the Congress can always take up anything.

Mr. WILLISTON. I know that.

Senator MALONE. They can amend the Tariff Act or they can amend any particular duty or work on any particular product so that if the difference in cost of production principle laid down by the 1930 Tariff Act which had been the policy of Congress from 1789 to 1934 prevails then those committees can take up a bill introduced in the Congress, Senate or House, as to special considerations on products which are not exactly acceptable or fitted to just merely a tariff so that the first thing to do is to let it expire in any case.

Mr. WILLISTON. I testified against it before the House Ways and Means Committee.

Senator MALONE. I know you did and I am putting in a statement over there myself. The first thing in any case, if we think that special legislation is necessary, is to just sit still and go back to the Constitution of the United States for the regulation of the economic system of the United States through imports and tariff regulation which reverts to the legislative department where the Constitution puts it and separates again, as the Constitution does pointedly separate, the regulation of the national economy and the fixing of foreign policy. Then as I have already outlined and as the Tariff Commission letter outlines, let them proceed on that principle laid down definitely in the 1930 act and then Congress can take up any special legislation it wants to take up through the consumers or the producers or the suggestion of anybody if they want or on their own recognition.

Mr. WILLISTON. Let us hope that that happens and when it comes to the Senate Finance Committee, I know you will do your best to see that it does happen.

Senator MALONE. Thank you. You have made a good witness.

Mr. WILLISTON. Thank you.

Senator MALONE. Mr. Huelsdonk. Mr. Huelsdonk, if you have a statement that you want to present, identify yourself for the purposes of the record and then you may either read your statement or submit it for the record and comment on it.

STATEMENT OF L. L. HUELSDONK, SECRETARY-TREASURER-GENERAL MANAGER, BEST MINES CO., INC., DOWNIEVILLE, CALIF.

Mr. HUELSDONK. I think I would prefer to read it as I can read it almost as fast as I can comment on it.

I would first like to thank you, Mr. Chairman, for the opportunity of appearing before your committee and presenting the problem of the domestic gold mines.

My name is Lewis L. Huelsdonk, of Downieville, Calif. I am currently a member of the California State Mining Board and chairman of the gold committee of the Western Governors' Mining Advisory Council. However I am giving this testimony strictly as an individual and independent gold miner.

The gold mining industry of the United States was first forced into an obscure corner of our economy by WPB order L–208 nearly 16 years ago. The results of this order, which deprived many citizens of their constitutional rights, are now well known and great detail at this time is unnecessary—however a short résumé of this action will be helpful in placing sequence to the course of events which led directly to the deterioration of the domestic gold mining industry—

and ultimately to an indirect adverse effect on the entire mining industry of the United States.

Under the stress of war, governmental officials felt that gold had no strategic value in a war economy and that by arbitrarily closing down the gold mines of the United States, thousands of miners could be forced into the mining of other metals. Much testimony subsequent to the war has proven the fallacy of this contention. Only a handful of gold miners were diverted and, as shown by the attached sheet taken from the statistics of the United States Department of the Treasury—war industry demanded enormous amounts of gold over and above their peacetime requirements. These demands were granted by the sale of monetary gold by the Treasury Department and in 1945 (the year the war ended) $102,452,672 worth of gold at $35 per fine ounce was sold into the war economy for industrial use as compared to a 6-year prewar peacetime yearly average requirement of less than $500,000.

Senator MALONE. Let me ask you this at this point: Has not the pressure been on since 1933 that gold was not necessary in our economy?

Mr. HUELSDONK. I believe that you are correct in that. I do not know where that derived from.

Senator MALONE. It was from our own administration.

Mr. HUELSDONK. Yes.

Senator MALONE. Did not Lord Pines, who was a very, very prominent economist, from England, say that the more you owed the richer you were and gold was not necessary?

Mr. HUELSDONK. That is correct. He was one of the drafters of the International Monetary Fund along with Harry Dexter White in bringing this thing about.

Senator MALONE. Could you give us a little information on what instigated that Bretton Woods meeting and the effect of it?

Mr. HUELSDONK. Well, I have the effect of it a little further on in the testimony.

Senator MALONE. When you get to it, elaborate on just what administration.

Mr. HUELSDONK. I can come to that.

This rather conclusively indicates that a mistake was made. However, during "war hysteria" many mistakes are made and although the gold mining industry suffered a knockout blow, they would, no doubt, have recovered without complaint, if they had not been exclusively forced to remain on the floor under a followup of punches from debt management, monetary policy, and inflation.

The second devastating blow came in 1944 under section 1 of article IV of the final act of the Bretton Woods Agreement where foreign monetary advisers proved their skill in negotiations by causing the par value of their currencies to be tied to the United States dollar as a common denominator with gold in such a way that their monetization of our depreciated dollar does, in effect, increase their currency supply (from this source) in direct proportion to the degree of our dollar's depreciation. This is done without inflationary consequence in their own fiscal affairs, because foreign-held American dollars, regardless of their status in purchasing power, are 100 percent redeemable in gold by the foreigner at $35 per fine ounce as an obligation of

our Treasury Department. In other words, the dollar of today, although having less than one-half of the purchasing power of the 1944 dollar, will collect as much gold for the foreigner as the 1944 dollar did. This simply means a trade advantage for the foreigner (if no protective measures are used) because he now receives twice the number of dollars for the volume equivalent of his 1944 exports to the United States; and since the depreciated dollar of today commands the same amount of gold for the foreigner as the 1944 dollar did, he can now receive twice the amount of gold for the volume equivalent of his 1944 exports to the United States for the final settlement of his trade balance.

Senator MALONE. Let me ask you at that point, is it customary and is it not still being done that foreign nations by and large manipulate their money value in terms of the dollar in terms of trade advantage and, generally speaking, is not their fixed price much above the market price, the value of their currency in terms of the dollar?

Mr. HUELSDONK. In my opinion, yes, because by nationally monetizing the dollar they can issue currency in the same terms of gold and, since they receive those dollars even more easily in terms of trade; in other words, for the same product that they sold in 1944 they can sell now and get twice as many dollars and, by nationalizing those dollars, they act the same as gold in foreign reserve accounts.

When they use those dollars which they get twice as easily as they could get gold to put in there, the result is that they have a trade advantage because they ultimately settle their trade balances in gold.

Senator MALONE. Yes. Then is it not customary that they fix a definite number of francs in France that they say that the dollar is worth?

Mr. HUELSDONK. I see what you mean.

Senator MALONE. But the black market and state market are often 2 or 3 or 4 times as much as that?

Mr. HUELSDONK. I was in Paris last year and in these other countries where I noticed that I bought francs at around 400 on an average on what they call the black market which is simply the value market of their money. The official price at that time was only 350. On government settlings they settle on the official price and around, I think the actual market value was about 450. I did that for the purpose of finding out what the actual value of the franc was.

Senator MALONE. Then do they not often have 2 or 3 or more official values for whatever they want to do with it whether import or export?

Mr. HUELSDONK. They have a number of varieties of currency depending upon what country they are dealing with and what goods they are buying for the different countries.

I noticed that particularly in Spain.

Senator MALONE. That is all to their trade advantage.

Mr. HUELSDONK. Yes. It will depend upon what advantage they can get in their barter system.

Senator MALONE. I presume you covered this but what is the cure for that? Is it to go back on a standard as we had at one time up to 1933 so that where you traded dollars for francs or pounds you got a piece of paper that represented the same number of grams of gold or ounces of silver and you could bring them home or take them

to a bank because they represented the same actual value in metal?

Mr. HUELSDONK. That would be very true convertibility but in my opinion now we have such a short supply of gold that we could never go back to convertibility.

However, it is going to be necessary to discipline the currency of the world.

Senator MALONE. Even if we do not go back on the gold standard, do we not have to recognize these differences in trade?

Mr. HUELSDONK. We are going to have to do it. If we do not, we are going to lose the value of our entire money supply.

Senator MALONE. Are you familiar with the hearings that the Senate Finance Committee is conducting and will take up again on April 1, where it was testified by the Secretary of the Treasury and also by Mr. Martin, who is the Chairman of the Federal Reserve Board that, if all the dollar balances were converted in European and Asiatic nations that are readily accessible to convert and presented, that we would have less than $5¾ billion worth of gold left?

Mr. HUELSDONK. I am quite familiar with those hearings and I quite agree with them because their private dollar balances can readily be converted into national dollar balances and that would amount to around $16.3 billion at the present value which subtracted from our 22-and-some tenths billions would leave around seven-and-some-tenths billions.

Senator MALONE. It took 3 days to get that information from the Secretary of the Treasury and 6 days to wring out the Chairman of the Federal Reserve Board.

Mr. HUELSDONK. I read the testimony and noticed that it was quite a job.

Senator MALONE. I am not an economist but I wanted to make a record so that the economists could study it.

Mr. HUELSDONK. You did a good job in making the record and bringing out the facts. This has dropped our guard and also opened the way for a low blow to the market-seeking American mining industry as stockpile quotas and price supports run out.

Of course, what we are running against now is on account of the advantage of the dollar. Since the dollar has depreciated roughly to 50 percent, it is much greater than that if you use the right indexes.

They are using an index from 1949 now but the last change in gold was 1935 so, to my way of thinking, the index should start in the last index of the price of gold. However, using the 1948 one, the dollar has depreciated one-half which means that where these dollars are being used in monetizing the foreign currency we have a trade of just the difference directly.

Senator Malone. I think they testified the 1948 dollars are worth 47 cents.

Mr. HUELSDONK. Because the Bretton Woods agreement obligates the United States to redeem foreign-held dollars in gold in unlimited amount at the 1934 price, it is impossible for any entirely free gold market to exist in the world today wherein the true value of gold can be resolved.

A further damaging blow was delivered to the gold mining industry of the United States in 1945 when the gold reserve requirements were lowered to 25 percent for the purpose of adding to the supply of

money without increasing its tangible gold base. This action loaded both barrels with depreciated dollars and pointed the gun directly at the already bereft gold miner.

Senator MALONE. I want to say this to you and you take it for what it is worth and think about it. If I were not in the Senate and handling this business of an additional price for gold, I would not mention the gold miner. The reason is that the only reason that we have gold or silver is to stabilize our monetary system. If it is not needed for that then all it is good for is jewelry. I think it is needed for that purpose simply because the world has always used gold and silver and you can eat on it any place in the world whether it has the stamp of any nation on it or not. Everybody knows that it is. To get it back as money and to arrive at a proper value if the value is to be changed, economists disagree whether it needs to be changed or not.

Mr. HUELSDONK. That is right.

Senator MALONE. If it does need to be changed there is one reason to change it and that is for the economic system of the United States and not to support a gold miner.

Mr. HUELSDONK. I agree thoroughly but at this committee, since the gold mining industry was being brought up, I brought it up for the benefit of the committee to realize the situation of the gold miner.

Senator MALONE. If you go before the Senate Finance Committee or any other committee talk about it from the standpoint of an economic structure and an honest money.

Mr. HUELSDONK. That is right.

Senator MALONE. Incidentally then, if any industry profits by it, it would be purely coincidental.

Mr. HUELSDONK. That is right.

Senator MALONE. The help you are going to need to change it is east of the Rocky Mountains, not west.

Mr. HUELSDONK. Gold is a condensed form of human effort and productivity in the most dense form imaginable for the purpose of barter and it would be like having an automobile in the garage. You get a ticket to get that automobile. The fellow gives you the ticket. The tangible value of the car is the fact of the use of it. Your wife may want it sometime. So he can give you another ticket. And finally your daughter wants it. And you have too many tickets and nobody can get the car.

Senator MALONE. You are exactly right but I am giving you an idea of how to go about it.

Mr. HUELSDONK. I understand.

In the preceding paragraphs I have tried to outline as briefly as possible the main causes for the virtual collapse of the domestic gold mining industry. I will next outline the extent of that collapse, using the State of California as an example. California was chosen, because figures were readily available and because it was one of the large gold-producing States with a relatively small percentage of its production as a byproduct. Also, its mines ranged from large to small in somewhat uniform distribution and with a great variance in production and recovery methods.

The basis used here as the definition of an active gold mine is: The steady employment of at least 1 to 2 and by having a record of gold sales to the mint. There is no purpose for using this definition

except that it was furnished with the figures and explained by Fenelon F. Davis, senior geologist for the California State Division of Mines, who supplied the information for the following schedule:

This schedule is gold production in California from 1940 to 1957.

The figures in this chart were obtained from the United States Bureau of Mines Yearbook and show the number of mines, both placer and lode, that were operating in each year from 1940 to 1956. Figures for the operating mines in 1957 are not yet available although they can be reasonably estimated (on a rate of decline basis) to be about 100 lode and 60 placer for a total of 160 overall operating gold mines. These figures have been placed in the schedule as estimates for 1957. The production figures are also shown on a yearly basis for the same period—with the 1957 production being estimated by the Bureau of Mines from preliminary figures. The number of gold mine employees are shown at the bottom of the schedule for the years 1940, 1946, 1955 and an estimate of 500 employees has been made for the year 1957 by deducting 600 men from the 1,100-man figure in 1955. This estimate is based on the closing of 80 gold mines between these dates.

Among the closed mines were the Idaho-Maryland and the Empire Star group, of Gross Valley, which had been maintaining a labor force of several hundred miners. The chart shows that in prewar 1940 (the peak gold production year for the United States) that 9,962 men were working in the gold mines of California. These figures include only the mines that employed 4 men or more, so it can reasonably be assumed that well over 10,000 men were engaged in the California gold-mining industry at that time. This, when compared to the above estimation of only 500 in 1957, indicates that at least a 95-percent drop in gold-mine employment occurred from the prewar year of 1940 up to the present time. This employment, of course, was a total loss to the communities, the State, and Government.

There is no reason to elaborate at this time on detailed figures which appear in the above chart. Its main purpose is to show the gradual rate of decline suffered by the gold-mining industry over a long period of years and the ultimate consequence, if nothing is done. Therefore, only the 1957 and 1940 figures will be used for comment.

In 1940 a total of 1,866 gold mines were operating in California. Broken down, these consisted of 1,030 lode mines and 836 placer mines. By the end of 1957, an estimated total of only 160 of these mines were able to stay in operation. One hundred of these were lode mines and 60 were placer mines. In the overall picture approximately 1,706 operating gold mines, or 91.5 percent, were unable to resume operations and stay in business. Broken down, 930, or 90.4 percent, of the lode, and 776, or 92.9 percent, of the placer mines were unable to keep their heads above water.

In 1940 the gold mines of California produced $50,948,485 worth of gold and in 1957 the output amounted to only $5,835,500, or approximately 11½ percent of the 1940 amount. Percentagewise, production fared slightly better than either the loss of employment or the mine shutdown rate. This can possibly be explained by the precently relatively large production of the bucket-line dredgers of the Natomas and Yuba Dredging Cos. where unit output is high and labor ratios are low.

To compare these California figures with the balance of the United States, we must remember that the great Homestake mine of South Dakota is currently supplying about 32 percent of the total gold production of the United States and therefor should be treated as an exception when considering the economic position of the average gold producer. (This, however, does not mean that their problems are not severe.) Also, it must be remembered that, outside of California, copper and other ores have accounted for approximately 39 percent of the United States gold production as a byproduct. If these amounts are added to the production of California and the sum subtracted from the estimated $63 million worth of United States gold production for 1957, a production balance of only about 12½ million dollars will be left to the credit of the straight gold-mining industry of all of the other gold-producing States. Their circumstances will, therefore, somewhat closely parallel the situation in California.

I think that the preceding information is sufficient to demonstrate that a dilemma between monetary policy and the survival of the domestic gold-mining industry is in evidence. This creates a difficult problem which is greatly in need of an intelligent and honest solution, because it also indirectly affects not only the other domestic mining industries and trade, but also every citizen of our country.

The chief problem of the straight gold mining industry of the United States is the fixed price of gold in relation to the continual increase in the cost of supplies and labor to produce it. Both of these cost items have much more than doubled over the intervening years of gradual inflation to the point where economies resulting from mechanization and modern efficiency are no longer applicable. The higher grade sections of ore bodies are rapidly being depleted with the resultant unrecoverable loss of adjacent marginal ores. Research for new uses can do nothing to advance the position of the domestic gold mining industry, because monetary policy prohibits the producer from participating in the profits from its commercial use. He must sell to the Treasury Department at the 1934 price of $35 regardless of the profit that is reaped by the industrial user—who, incidentally, has purchased, since World Ward II, nearly $200 million worth of gold more than the domestic producers have produced.

Further detail into other related problems, such as high grading, land management, taxes, et cetera, are not necessary to prove the necessity for an immediate solution, if domestic gold mining is going to remain in existence. The answer is obvious without the solution. The price of gold must be tied realistically to the cost of production. A positive way to do this would be through a free and open market with full convertibility of currencies. This, of course, would produce the cure by killing all of the patient's friends through a deflationary slaughter because of the inflated degree of today's currencies.

Subsidies or bonuses could be paid to the producers through a tax levied against the purchase of gold for industrial use. This, however, could amount to only a token payment compare to the amount needed to aid more than just a few of the operators who are now sitting on the margin.

I am attaching a schedule to this report which is self-explanatory in outlining such a program. Even if a plan of this type were put

into effect, its purpose would soon be absorbed in the economy, if inflation were allowed to continually creep. It is obvious that if the problem is to be solved, it must fit into the present economic picture either by improving it or by not distrubing it indiscriminately. Economic science, not being exact, seems possessed with a faulty rudder which guides the honest thinking of many heads in opposite directions. This leads to much confusion which time alone can clear—but habits also mould rigidly with time and often challenge the changes that time prescribes.

In other words, our montary advisers, during the confusion of the Bretton Woods agreement, did not anticipate that the dollar could depreciate when they agreed to allow it to be tied firmly to gold at $35 per fine ounce in foreign accounts; so no provisions were made for this eventuality. Time has proven that the dollar not only could, but did, depreciate and that if changes are not made, that it will continue to depreciate until all of our depreciable assets; (i. e., gold) are claimed.

Senator MALONE. Let me ask you at that point if this tying together at Bretton Woods did not include gaining the consent of the Bretton Woods nation signers in order to change the value of gold here?

Mr. HUELSDONK. Yes. I think it had to have full consent. I have the original United Nations Monetary Conference here, the final act.

Senator MALONE. Do you think you could get that?

Mr. HUELSDONK. I think the only way you could get it would be by threatening to withdraw and withdrawal is rather simple.

Senator MALONE. How do you withdraw? Will you put it in the record?

Mr. HUELSDONK. I would be glad to put it in the record. It would be in article 25, section 1, withdrawal of membership, rights of members to withdraw:

> Any member may withdraw from the fund at any time by transmitting a notice in writing to the fund at its principal office. Withdrawals shall become effectice on the date such notice is received.

This section 3, the conditions would be the settlement of accounts of the members on withdrawing. Of course, if we would withdraw and settle our account there would be no Bretton Woods agreement.

Senator MALONE. Does that mean we would have to pay all those dollar balances before we would get out?

Mr. HUELSDONK. That is the way I interpret it.

Senator MALONE. That is all. I have made a reference to it. I think it is good to have it here.

Mr. HUELSDONK. That was the original setup when Harry Dexter White was the International Monetary Fund Chairman. He was the Chairman.

Senator MALONE. Is White that great patriot that suggested that we give $5 million to Russia to furnish all these strategic metals?

Mr. HUELSDONK. That is the same White. This was 1944 that this agreement was made in July.

Senator MALONE. Then he died rather suddenly after this. They started to investigate him, did they not?

Mr. HUELSDONK. That is the same fellow.

Senator MALONE. Go ahead.

Mr. HUELSDONK. Some time, of its own accord, will eventually force a more drastic change than that which it is now prescribing, if nothing is done to break our habit of false pretense regarding the parity of our dollar in foreign reserves.

This job should be done by lowering the weight of gold contained in the dollar to approximate a value of $70 per fine ounce. This revision should replace the weight and fineness figures (representing $35 per fine ounce) that are now contained in the Bretton Woods Agreement. Provisions should also be included for making periodic adjustments for the purpose of holding parity, within reasonable limits, between the United States dollar and gold.

The immediate foreign reaction to such a move would, in all probability, be somewhat shocking. However, as tempers cooled and the necessity of correcting this maladjustment was understood, no serious trouble should be forthcoming—because, after all, the purpose of the revaluation would be to adjust the Bretton Woods Agreement to conform to its original intent. The general effect would be a rise in the world price of gold to $70 per fine ounce. Dollars would still act as gold in foreign reserve accounts except that their redemption under revaluation would command only one-half the former weight of gold from the United States Treasury. This is the answer to the equalizing of the depreciated United States dollar with gold. It would also prevent a possible run on our gold and place foreign-held dollar balances in a more favorable relation for the purchase of American goods.

The most intense objection would come from the countries holding a surplus of American dollars in their monetary reserve accounts. However, it was not the intent of the Bretton Woods Agreement to increase the wealth of individual nations through the depreciation of the American dollar and in most cases foreign monetary reserve strength would be increased, rather than decreased, as a result of doubling the value of their gold holdings.

Senator MALONE. Let me ask you at that point what makes you think that someone did not think this thing through before the agreement was made?

Mr. HUELSDONK. You may be right but they were not thinking in the direction for the protection of the United States.

Senator MALONE. Who has been, in the last 25 years?

Mr. HUELSDONK. Senator, I couldn't answer that. I have no information.

Senator MALONE. Nothing that has come before Congress in the last 25 years shows any thought of protection of the United States of America but it shows the division of wealth with world government at the end of the rainbow.

Mr. HUELSDONK. That is right.

Senator MALONE. I have been exposed to more of this recently than you have. You are quite a ways from here as I was in my business of engineering. Since I have arrived here I have found that there are people in small nations who controlled the world for 300 years through colonialism that conceived this economic colonialism. We are now perhaps more under the economic colonialism to the capitals of Europe than we were before we declared our independence in 1766 because they would not allow us to manufacture anything or produce

raw materials. Now through our own signatures we have agreed virtually not to do so; have we not?

Mr. HUELSDONK. You are right. That is the way I see it. Who did it, I do not know.

Senator MALONE. We know who did it. Mr. Harry Dexter White had a hand in it and Mr. Alger Hiss. They are all following the policy of division of money to Europe and I call it funneling money. It is inflation. Do you not think that these nations who had done this thing for 300 years through force were smart enough to cook up a deal where the same thing would come about peaceably through treaties?

Mr. HUELSDONK. You are possibly right.

Senator MALONE. I think I am right.

Mr. HUELSDONK. The direction is going that way. By the information that I have and what I have seen it certainly looks like there is an effort at least to redistribute the monetary gold reserves.

Senator MALONE. They are distributing our markets throughout the nations of the world, distributing our cash throughout the nations of the world, and I believe that this was foreordained, that is, thought through by some group of nations before we were enveigled to get into the thing.

Mr. HUELSDONK. I think they outthought us.

Senator MALONE. I wish you would identify this document from which you read the provision that we could withdraw from this Bretton Woods Agreement.

Mr. HUELSDONK. This is from the United States Monetary and Financial Conference, Bretton Woods, N. H., July 1 to July 26, 1944. It is the final act and related documents.

Senator MALONE. What document is this?

Mr. HUELSDONK. It is by the State Department.

Senator MALONE. This is the United States Monetary and Financial Conference, Bretton Woods, N. H., July 1 to July 22, 1944.

Is this document identified? Yes. Department of State Publication 2187, Conference Series 55.

That will identify it.

Mr. HUELSDONK. There would be nothing immoral about a rectification. In fact, it would show a lack of moral courage if we neglect to do this and allow ourselves to become weakened beyond an ability to fulfill our obligations either at home or abroad. This move to gain equal terms would not upset monetary policy seriously beyond bringing it up to date.

We now come to the effects that such brave action might have on our domestic economy. It would immediately put many gold mines back to work and, as a conservative guess, within 5 years the production of gold would reach the 1944 level or in the neighborhood of $400 million yearly on a revalued basis. The economic repercussion from gold mining are much more far reaching than those of other industries, because its gross product has the present power to create a base supply of new money to the extent of four times its production. This simply means that by steadily increasing production for the next 5 years, $1,600 million of new base money would be entering the economy on a yearly basis. This would be new money created through the efforts of productivity and employment. There would be no taxes, monetization of debt, or deficit spending required to enter this money into the economy

where it could be expanded through banking and credit policies to nearly $10 billion of yearly overall money supply. This would not be inflation money, because its gold base simply would be keeping pace with the currency issue. This production of gold would be giving steady, direct employment to nearly 50,000 men and supporting indirectly perhaps a half million people.

Doubling the value of gold would naturally double our monetary reserves, but it is a fallacy to claim that this would create inflation. There are many ways and means to adjust for this situation; for instance, one half of the weight of gold could be sterilized into a stabilizing fund, since machinery for this is already set up in the Treasury Department and it has been effectively used in the past. From another approach, the legal gold reserve requirement would be raised from 25 to 50 percent. You would get the same effect that way. Neither of these methods would create new money from the monetary reserves. Another alternative would be the retirement of $22 billion of the national debt and the saving of the interest now being paid on this amount. Some of the profit could also be used to redeem foreign-held dollars on a ratio basis to adjust for losses in foreign reserve accounts where special hardships could be shown as a result of the revaluation of gold.

The question of gold production from Russia is often brought up as an objection to the revaluation of gold in the free world, but it certainly should not enter the picture simply because we cannot avoid competition from Russia in any event. Under the present conditions she is gaining a decided advantage with her low costs and all-out effort.

In regard to that there has been a recent publication of which I have a copy.

Senator MALONE. Can you identify that?

Mr. HUELSDONK. I would like to bring it out to show the recent efforts of Russia. It specifically shows the new hydroelectric plants they are putting out to furnish low-cost power to the gold-mining operations in Siberia. I will enter it in the record.

Mr. Chairman, in the preceding testimony I have attempted to the best of my ability to present to you and your committee the problems of the domestic gold mining industry as I see them:

First, by analyzing the cause of their present adverse circumstances;

Second, by showing the results of this adversity;

Third, by outlining the size and scope of the present problems;

Fourth, by offering what I think is a sound basis for a solution to the overall problem. This proposal is being offered; provided that none of the free market bills which are now before Congress pass.

I have been sincere in my efforts and honest in my appraisal and I feel certain that something must be done soon, for the good of the Nation, to adjust the imparity between the supply of gold and the issuance of currency. We cannot go backward without a devastating depressionary effort, so the answer must rest somewhere within the reach of gold revaluation.

Senator MALONE. You are familiar with this S. 1775, which I have introduced for a free market for gold in this Nation so that it will be graded freely to determine what it is worth?

Mr. HUELSDONK. That is right.

Senator MALONE. Do you like that method?

Mr. HUELSDONK. I like that method. If it will go it is O. K.

Senator MALONE. Nothing is very likely to pass now. If times get bad enough we will keep holding it in front of them. S. 1897 would then have us back on the gold standard.

Let me ask you, do you think if we go back on the gold standard that it might check inflation?

Mr. HUELSDONK. Well it would stop it very definitely.

Senator MALONE. If you stop inflation then many of the things about which you complain would be cured?

Mr. HUELSDONK. You see, you couldn't go back on the gold standard at $35 because it would have to be restandardized.

Senator MALONE. Many economists and some good ones think you can. I am glad to have your opinion that you cannot.

I spent 2½ months behind the Iron Curtain in 1955 and traveled 14,000 miles in Russia and was in the Ural Mountains and a thousand miles east of the Urals. It is a great country for raw materials. Many believe that gold could be Russia's secret weapon.

Mr. HUELSDONK. I believe that myself.

Senator MALONE. No one in the world today believes that gold and silver is not necessary in the monetary system except us.

Mr. HUELSDONK. That is right.

Senator MALONE. We have arranged to divest ourselves of three-fourths or nearly four-fifths of our gold, that is, the right for a nation to secure it. Under my questioning both the Secretary of the Treasury and the Chairman of the Federal Reserve Board said that, of course, they could refuse to pay in gold. I said, "What would be the result?"

They say it would be a severe depression of our money value on the world exchange. I said, "What else?" I kept pressing for the answer. They finally admitted that it might cause a very severe depression in the United States so that as a matter of fact we would, have our choice of taking the consequences of taking a depression here and a severe depression of the value of our currency in terms of another nation's money or allow them to take the gold and just continue to assume that gold has no place in stabilizing money.

I think you have made a good witness.

We have a resolution introduced by our chairman to investigate the gold situation and its relationship to the monetary standards, Senate Joint Resolution 16.

Mr. HUELSDONK. I appreciate it because I have been asking for that for a great many years. An honest investigation of this thing would be the thing.

Senator MALONE. I would say to you again and I hope that the mining fraternity would consider that if you ever get a change in the price of gold or return to the gold standard it will be on account of the monetary system, not on account of gold miners.

Mr. HUELSDONK. Right.

Senator MALONE. I said rather facetiously before I was in the Senate that if I were representing the gold producers of this Nation before Congress to get an adjusted price I would not speak to a gold miner if I met him in the halls of Congress for fear someone would think I knew him. There are not enough votes here and I do not know that you would be justified for return to gold to keep a gold miner in existence but I think it is necessary to stabilize the economy and the Eastern States and Middle Western States are just as much in need of it as the Western States.

If your people would come before the Senate committee and are able to get hearings on any such an adjustment, I think you could be of more help.

Mr. HUELSDONK. I agree with you.

Senator MALONE. Thank you very kindly for your testimony.

Mr. REDWINE. I would like to call to your attention that the committee has received a letter from the Office of Defense Mobilization answering several questions that were raised by several members of the committee. I ask that the letter be printed at this point of the record.

Senator MALONE. It is so ordered.

(The letter is as follows:)

EXECUTIVE OFFICE OF THE PRESIDENT,
OFFICE OF DEFENSE MOBILIZATION,
Washington, D. C., April 10, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

DEAR SENATOR MURRAY: At the hearing before the Minerals, Materials, and Fuels Subcommittee on the morning of March 24 several members of the committee asked for information from our records.

Senators Dworshak, Bible, and Malone inquired concerning purchases of cobalt, copper, and tungsten abroad at prices above the world market or above domestic prices. No cobalt is being purchased at premium prices. One copper contract written in 1953 to support nickel expansion provides a price of 27 Canadian cents per pound—a price which has become a premium over world market prices only in the past few months. Four tungsten contracts, written in 1952, presently require the payment of premium prices because of the sharp drop in prices in the past year. When written each of these contracts called for deliveries at prices substantially below the then world and domestic prices. They were written to support expansion during the Korean hostilities. Three of the tungsten contracts expire by June 30, 1958. The copper contract and the one remaining tungsten contract will expire at the end of 1959.

Senator Bible asked for a list of materials the quantity of which in the stockpile is less than the procurement priority level. They are: Amosite asbestos, Jamaica bauxite, chromium metal, small diamond dies, metallurgical fluorspar, jewel bearings, magnesium, chemical type B manganese, muscovite block and film mica, palladium, selenium, and silicon carbide.

Senator Bible also asked concerning the quantity of low-grade tungsten, manganese and antimony in the stockpile and the Defense Production Act inventory and inquired concerning the beneficiation of those materials. The quantities of subspecification material are: 1,140,424 long dry tons of manganese ore, and 44,150,889 pounds of tungsten. Inventories of antimony are all specification grade. We are not proposing the beneficiation of these two materials because Government inventories and obligations for the specification grades exceed the long-term stockpile objectives.

Senator Malone inquired concerning the development of manganese deposits of the Cuyuna Range. Our information concerning these deposits is that this range contains several hundred million tons of very low-grade manganiferous materials. The average manganese content of about 5 percent is far below commercial specifications, which require ore averaging about 46 percent manganese. A small commercial use has been developed by the Manganese Chemicals Corp. which currently has a Government contract to use these ores to produce synthetic manganese dioxide.

If there are any other questions which we may answer concerning metals and minerals procurement by the Government, please let us know.

Sincerely yours,

JOHN S. PATTERSON, *Deputy Director.*

Mr. REDWINE. Mr. Chairman, at this time I would like permission to insert a number of statements the committee has received from individuals and organizations pertaining to these hearings.

Senator MALONE. Without objection they may be entered in the record at this point.

(The statements are as follows:)

UNITED STATES SENATE,
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE,
April 24, 1958.

Hon. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
United States Senate, Washington, D. C.

DEAR MR. CHAIRMAN: Attached is a statement on silver submitted by Mr. Elgin Groseclose in connection with the committee's recent hearings on the domestic minerals industries.

I would appreciate your making the statement a part of the record of the hearings.

Cordially,

ALAN BIBLE.

STATEMENT ON SILVER BY ELGIN GROSECLOSE, PH. D., OF CHECCHI & CO., CONSULTING ECONOMISTS, WASHINGTON, D. C.

This is a statement submitted at the invtiation of Senator Alan Bible by Elgin Groseclose of Checchi & Co., consulting economists of Washington, D. C., on behalf of clients of the firm engaged in silver production.

SUMMARY

Contrary to the case with most of the United States mining and mineral industry, silver mining has for a long time been a shrinking activity. While total metallic ore production has increased threefold since the turn of the century, silver production has fallen by a third.[1] Of 25 mines accounting for 82 percent of total silver production in 1955, only 3 were primarily silver producers. (In 1950, there were 5.)

World silver production has followed the same trends. Average annual world production during the first quarter of the century was around 196 billion ounces; world production in recent years has been around 222 million ounces.

The shrinkage of United States production has not been due to falling domestic demand for the metal. At the beginning of the century consumption of silver in the arts and crafts ran around 20 million ounces annually while demand for silver for minor coinage consumed around 3 million ounces annually. Current requirements of silver for minor coinage have been running around 37 million ounces annually or about the amount of domestic production, while the arts and crafts, and increasingly industrial uses, consume around 100 million ounces annually. Supply and demand data for recent years are shown in table 1.

The immediate cause of declining silver production is to be found in the price received for silver in relation to the cost of producing silver. Mining costs, moving with the general price level, have made unprofitable the search for and development of ore bodies, and have forced the closing of many existing mines. The operation of the price squeeze can be seen in a few price comparisons.

In 1900 silver was selling for around 60 cents an ounce as against 67 cents for a bushel of wheat. Today, the silver miner receives from the Treasury 90½ cents an ounce for his silver, while the price of wheat, under a Government price support system, is around $2.25 a bushel. Copper, which sold for 13 cents a pound in 1900, sells today for 25 cents a pound; tin has moved from 19 cents to 92 cents, while lead, which sold at 4 cents in 1900, is currently quoted around 12 cents.

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[1] Total value of United States metallic ore production in 1900 was $189 million compared with $628 million in 1952, stated in constant (1935–39) dollars. Copper production in 1900 was 303,000 tons and 1,072,000 tons in 1950. Silver production, which averaged 55,760,000 ounces per annum for the period 1901–5, in recent years has been around 37 million ounces annually.

The anomaly of the silver mining industry, of rising demand and falling production, and the persistence of a depressed price, is explained by the widespread demonetization of silver in the world at large, and the movement of Government-held stocks of silver into the market in competition with newly mined silver. Upon this point, market analysts generally agree that the heaviness of the silver market is due to the overhang of United States Treasury stocks and the uncertainty as to United States public policy in regard to silver. As the Handy and Harmon review for 1957 stated: "The market continued to be dominated by the United States silver laws and the Treasury's policy under these laws." The immediate outlook for the silver mining industry depends largely upon a resolution of public policy, and for this reason, the discussion that follows will be devoted to this subject. In addition to these general pressures on the silver market, there is the specific pressure resulting from sales of silver in the market by the Secretary of the Treasury, from the Treasury's general fund holdings of silver.

ECONOMIC SIGNIFICANCE OF SILVER

The value of United States silver production is around $35 million annually, an insignificant item in total United States productive activity. However, its significance to a wide segment of the mining industry is much greater than these figures would indicate. From 60 to 75 percent of mined silver comes as an incident to the mining of other nonferrous ores, chiefly copper, lead, and zinc, and their combinations. From 20 to 25 percent of mined silver comes from copper ores and some 40 percent from zinc-lead, zinc-copper, lead-copper, and zinc-lead-copper ores. (See table 2.) The market for all these metals has been under pressure, partly from falling industrial demand, partly from competition from foreign supplies, partly from cessation or reduction of Government stockpiling purchases. Total gross receipts of the copper, lead, zinc, gold and silver mining companies in 1954 (493 companies) amounted to $819,500,000. The net income (less deficits) of these companies (before taxes) was $161 million. In the same year silver production amounted to 36,941,383 ounces with a value (at 90½ cents per ounce) of $35,094,314. Silver, therefore, represented about 4.3 percent of the total mining receipts, but its importance in the final profit figure of $161 million was much greater. Of the total 493 companies reporting in 1954, only 111 reported net income, and the question to which the statistics do not reveal the answer, is how many more of these 111 companies would be in the deficit category but for the income derived from silver production.

Any adverse action affecting silver, therefore, would be an added depressant to the total nonferrous mining industry. To illustrate: Western lead ores in 1953 yielded an average of 5.757 ounces of silver per ton and in 1954 an average of 3.781 ounces per ton. The same ores yielded in 1953 approximately 107 pounds of lead and in 1954 approximately 113 pounds of lead. At 14 cents per pound for the lead and 90 cents per ounce for the silver the relative values of the 2 metals in the ores mined are as follows:

Year	Lead	Silver	Total value
1953	$14.98	$5.18	$21.16
1954	15.82	3.40	19.22

SILVER AND ITS USES

Silver is a metal that since the begining of history has been greatly prized in the arts and crafts. In consequence of its beauty, utility, and high value in small units, it has been, throughout the greater part of history, used as money; i. e., as a means of payment, a store of wealth, and a standard of value. Silver remains today of importance in the arts and crafts, and in addition is of increasing utility in industrial applications not commonly associated with the arts and crafts—particularly in photographic film, in electronics, and more recently in electrical storage batteries. In most areas of the world, and among the vast populations of the world, notably of Asia, Africa, the Middle East, and Latin America, silver continues to be of great importance as a store of wealth. Since the 1870's, however, governments have generally demonetized silver as an official standard of value, and it is this anomaly that creates the main problems of the silver mining industry today.

Throughout history until the 1870's the price (or value) of silver was consistently much higher in relation to the price (or value) of gold, the other important metal of arts and monetary usage, than prevails today. From 1687 to 1873, this relationship fluctuated between one-fourteenth and one-sixteenth of the value of gold, ounce for ounce. A general demonetization of silver in Europe began in the 1870's. The effect of this policy was to modify the historic relationship in value between gold and silver by depressing the price of silver. This tended to cast silver into disrepute as a store of value and accelerated the process of demonetization. After the demonetization of silver in India in 1900, the relative value of the two metals has steadily widened, and the value of silver in recent years has been of the order of one-fortieth that of gold.

DEMONETIZATION OF SILVER

The events leading up to the demonetization of silver were the discovery of large new gold and silver deposits in the 19th century, particularly in California, in Alaska, and in South Africa, together with rapid improvements in the techniques of separation of the metal from the surrounding deposits.

The increase in gold supplies was also accompanied by the increase and spread of certain techniques for economizing the precious metals, as the process is called by monetary theorists. The process is that of authorizing certain officially approved banks to issue paper notes to the equivalent of several times the amount of precious metals which the paper notes are supposed to represent. (This is a process equivalent to allowing a government grain elevator to issue warehouse receipts for several times the amount of grain held.) The device served to multiply the apparent amount of gold several times, and thus produced the appearance of an abundance of money. The effect was a riot of speculative excesses that periodically culminated in exhaustion, loss of confidence in the money, calling of loans, business collapse, and industrial depression.

Meantime, the increase of international trade and communications seemed to indicate that only one metal of standard should be employed for transactions and consequently, beginning in the 1870's, the use of silver as a metal of monetary standard was gradually superseded by gold.

The idea of a universal standard based on gold was never realized, of course, and is farther from realization today than ever, because of the varying practice in various countries as to amount of paper money that may be created on the basis of the amount of gold held. The consequence has been that the actual moneys throughout the world have been in a state of confusion and have remained in a state of confusion to this day.

UNITED STATES MONETARY POLICY

Today, monetary theorists are almost unanimous in their denigration of silver as money, and in the world today the United States remains the only country that still maintains silver as an official money in its system. American monetary policy in regard to silver is generally attributed to the influence of a powerful silver lobby in Washington. It may, however, be the result of the political and economic sense of the American people, their innate suspicion of bank money, and a latent hunger for a form of paper money that can be redeemed at its tenor. United States monetary policy in regard to silver is governed by the Silver Purchase Act of 1934 which declares the policy of the Government to be the acquisition of silver for the monetary stock until such stock represents one-fourth that of gold. At the present time there are in circulation in excess of $2 billion in the form of silver certificates against which a reserve of 100 percent in silver is maintained, and it is worth noting that these certificates are the only paper money in the world that is fully backed by the metal which it purports to represent.

In recent years there has been pressure in Congress to repeal the Silver Purchase Act and in effect to demonetize silver by liquidating the existing Treasury stock of that metal. The question, therefore, is whether, in the face of dominant theoretical opinion and the general demonetization of silver abroad, United States Treasury stocks of silver still serve a useful purpose and should be maintained. Since the answer to this question is of vital importance to the United States silver mining industry, it would seem to be an appropriate question for the Senate Committee on Interior and Insular Affairs to consider and to express its views upon.

TREASURY SALES OF SILVER

The silver-producing industry is also being affected by the Treasury sales of silver. Such sales have increased substantially within the past 2 years, and because they are effectively in competition in the domestic market with newly mined silver, have a depressant effect upon the silver-producing industry. The overhang of further such sales is an added depressant. This silver is being sold at prices set by authority of the Secretary of the Treasury, and such prices represent a discount of nearly 30 percent from the statutory (coinage) price for silver.

The Secretary is authorized by the act of July 31, 1946,[2] to sell silver held in the Treasury's general fund at such prices as in his discretion he may determine, not less than 90½ cent per ounce. Under this authority the Treasury has been selling silver to users in the arts and industry or professions at 91 cents per ounce f. o. b. San Francisco, or 92½ cents per ounce f. o. b. New York.

The statutory price for silver—that is, the price at which the ordinary citizen may obtain silver from the Treasury—is $1.2929 plus per ounce. He obtains such silver by the presentation of silver certificates redemption. Treasury sales to selected buyers, therefore, are made at a discount of around 30 percent from the public and statutory price. The statutory price is the value at which the silver dollar has been coined since 1837 (with the exception of the interval 1873–78), which is 412½ grains troy silver.[3]

VOLUME OF TREASURY SILVER SALES

Since 1946, until 2 years ago, silver sales by the Treasury at discounts from the statutory price were modest and did not represent a threat to the well-being of the silver-producing industry. Such sales averaged less than 232,500 ounces per year during the fiscal years 1947 through 1955, and in only 1 year did such sales exceed 200,000 ounces.

In the fiscal year 1956, however, Treasury sales of silver at less than the statutory price amounted to 10,320,051 ounces, as against 56,159 ounces in the preceding year. In fiscal 1957, Treasury sales amounted to nearly 7,500,000 ounces. (See table 3.)

The effect of the release upon the commercial market of such quantities of silver may be judged by the volume of these sales by reference to total world and total United States production of silver. The 1956 Treasury sales were equivalent to more than 27 percent of United States production and to more than 4½ percent of world produtcion of silver in 1956. (See table 1.)

SILVER SALES AND PRUDENT FISCAL MANAGEMENT

Many people assume that as a result of the activities of the so-called silver lobby the Treasury has at its disposal practically unlimited quantities of silver. Such is not the case. The disposable silver in the Treasury, known as the free silver in the Treasury general fund, stood at less than 100 million ounces at the close of the last fiscal year (June 28, 1957). (See table 3.) Treasury need for silver for subsidiary coinage (fractional dollars) is currently taking more silver than comes into the fund from regular sources of supply. The effect of continued heavy Treasury sales to industry and the arts, added to coinage requirements, will soon exhaust the reserves. The Treasury will then be compelled to go into the market for the added quantities needed, with the probable consequence of higher costs to the Treasury.

Prudent fiscal management of the public funds would therefore indicate that Treasury sales of silver be discontinued in order to conserve silver for Treasury's own needs.

Prior to 1942 the main source of free silver was the operations under the Silver Purchase Act of 1934, by which foreign silver was purchased for Treasury account at varying prices. The total silver brought in under this legislation was 2,048,490,530 ounces, and at one time (June 30, 1942) the balance in this account amounted to nearly a billion and a quarter ounces. By the end of 1954, however, these reserves had been exhausted and the account has now been closed out.

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[2] 31 U. S. C., secs. 316d, 734d.
[3] 5 Stat. 136; R. S., sec. 3513; 20 Stat. 25; 31 U. S. C., sec. 316.

The principal current sources of free silver are the seigniorage on newly mined domestic silver acquired by the Treasury under the act of July 31, 1946, and miscellaneous silver receipts classified as "silver bullion ordinary." The seigniorage on newly mined silver is the difference between the price paid to the producer (90.505 cents per fine ounce) and the statutory value of the silver ($1.2929 plus per fine ounce), or 30 percent of the silver. Silver bullion ordinary is purchased at prices approximating the price of silver in the New York bullion market, and consists in the main of silver contained in gold deposits, silver in mutilated base-metal coins, and silver recovered from melting, refining, and coining operations. More recently, returns of lend-lease silver have been held in this account.

In addition to the free silver, a negligible amount of silver becomes available for subsidiary coinage through the return to the mints of worn and mutilated subsidiary (silver) coins for recoinage. During the 5 fiscal years 1952–56, only 9,012,090 ounces were received from this source.

Attention is invited to table 3, in which the free silver balances, by component accounts, are shown for the fiscal years 1947 through 1957. By the end of 1955 fiscal year the free silver balance had dropped to less than 17 million ounces. The increments since then are the result of the return of lend-lease silver, deposited in the silver bullion ordinary account. The total amount of silver lend-leased during the war was 410,814,344 ounces. In 1955 this silver began to return to the Treasury, and in that and the following year, 60,670,631 ounces were delivered. It is understood that since then an additional 100 million ounces have been received, leaving a balance still due of around 250 million ounces.

The Treasury's needs for silver for coinage, and the supplies available for the purpose, may be stated another way. For the 5 calendar years 1952–56, United States silver production is reported at 185 million ounces total.[4]

During the corresponding fiscal years, subsidiary coinage consumed 206 million ounces of silver.[5] During this period the amount that became available to the Treasury from newly mined domestic silver was 46 million ounces, while worn and mutilated coins returned to the mints yielded 9 million ounces.[6] The deficit of more than 150 million ounces was met in part from purchases of silver at market prices for the silver bullion ordinary account, but the main source was the return of lend-leased silver. When this source has been exhausted, the Treasury will be compelled to go increasingly into the market for its coinage needs.

NATIONAL DEFENSE NEEDS FOR SILVER

International political uncertainties and national defense needs have impelled the Government to establish reserves of strategic materials, particularly of various nonferrous metals. Under such conditions the Treasury's reserves of silver should not be further dissipated by sales in the market. The steady decline and near exhaustion of these reserves has been discussed. Their wartime importance may now be briefly reviewed.

The major importance of silver in wartime is monetary. A fact, which Americans with over 100 years of stable and popular government find hard to realize, is that the general condition of peoples throughout most of the non-English speaking world is one of political uncertainty and unstable government. If one includes the profound changes in the political structure of Great Britain in the 19th century, it can be said that the American constitutional system is the most venerable political order in the world. Changes of government, changes of regime, political upheavals, and revolutions, have been the continuing characteristic of the social scene in Asia, in Latin America, in the Middle East, and even in large parts of Europe.

The economic corollary is plain. Where people live under governments of uncertain tenure and unstable character they are unwilling to trust very far the paper moneys issued by such governments. There continues to remain a suspicion of any money that is not of pure metal, and with this suspicion a personal fear and sense of insecurity that impel the individual to keep a store of precious and easily transportable wealth by him at all times, against the day of flight, the time of rioting, warfare, or revolution.

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[4] Report of the Director of the Mint, 1956, p. 89, and Handy and Harmon.
[5] Reports of the Director of the Mint: 1955, p. 78; 1956, p. 32.
[6] Reports of the Director of the Mint: 1955, pp. 66, 71, 72; 1956, pp. 3, 32.

The historic form of wealth in small compass has been the precious metals struck in small pieces with an identification of their weight and fineness stamped upon them. This is coinage, or money in its elemental form. To this practice of keeping a reserve of the precious metals in coin monetary theorists have applied the opprobrious term of "hoarding," but in the light of political and psychological realities, it must be viewed in a more understanding light, as a normal process by which a man makes certain of his personal and family security in a world of unrest.

The ideal form of such wealth is, of course, gold, for a few pounds of it can represent a fortune to its owner. In vast regions of the world, however, and among some 1,800 million of the world's 2,800 million inhabitants, silver has been the precious metal most familiar to them and in consequence has been until recent decades the historic money of currency and account, and the popular means of capital accumulation. The preference for silver among these peoples has been due to their relative poverty—often a result of their own political insecurity—and to the relative abundance and cheapness of silver in the market. A demand for silver among them, for ornament, for safekeeping, and for purposes of exchange, has perisisted despite the encroaching influence of Western monetary theories, the efforts of several generations of governments to force them to other habits, and the practical disappearance of good silver coinage from among them.

WARTIME EXPERIENCE

These profund facts of monetary psychology were neglected by the British Government at a time when it exercised vast responsibilities in Asia. Early in the century, it demonetized silver in its Indian dominion and put that country on a theoretical gold standard. It dissipated its silver reserves. When World War I broke out, the forces above described began to operate; an immense and insistent demand arose in India for good silver metal; and the people began to turn in their paper money for redemption. The Dominion Treasury was unable to meet these demands, and an economic and political debacle threatened. In desperation, the British Government appealed to the United States for silver to avoid a collapse and to maintain its overseas supplies of war material and manpower. The only United States source from which the vast quantities of silver needed could be obtained was the silver coin in the United States Treasury. By authority of the Pittman Act, the Treasury melted down dollars to the extent of 200 million ounces of silver, and this silver was sold to the British Government for coinage into Indian rupees.

The lesson of 1918 was neglected. World War II came along and with it renewed unsettlement and unrest in Asia and demand for good money. Silver, far from obsolete, as monetary theorists had held, was required in even greater quantities. Before the war ended, some 410 million ounces were drawn down from United States reserves through the lend-lease mechanism.

SILVER AND THE CHINA DEBACLE

A further testimony to the utility of silver in time of unsettlement is offered by John Leighton Stuart, United States Ambassador to China from 1946 to 1949, during the collapse of the Nationalist Government of China, and prior to that a resident of China for nearly 50 years. In his book Fifty Years in China, he discusses the causes of the Communist success in China, despite the $2 billion of aid which the American Government provided the Nationalist Government.

"More crucial than strategy," he writes, "were silver coins with which to pay the troops. They did not want gold yuan (the goldbacked paper money), but 4 silver dollars per month apiece—2 United States dollars—or even 2 of these would sustain their morale. Otherwise, Communist agents could buy them off with hard money or even promises. The Government had nearly 300 million United States dollars in gold and silver bullion, but most of this was safely in Taiwan" (New York, 1954, p. 228).

INDUSTRIAL DEMAND FOR SILVER

In addition to its monetary importance in times of unsettlement, silver is becoming of increasing industrial importance in an electronic, atomic, and chemical age. Under wartime legislation 167 million ounces of silver were sold from

Treasury reserves to meet urgent industrial demand; in addition 902 million ounces were loaned to industry for recoverable applications (largely in release of copper for expendable uses). According to an Associated Press dispatch of April 10, 1958, the new United States submarines are using silver instead of lead in the storage batteries at a great saving of weight, the amount of silver required being around 400,000 ounces per vessel.

The importance of silver reserves for defense needs is accentuated by the reliance of United States industry upon imports to meet current industrial and professional needs. The day has long passed when immense United States silver production found its markets abroad. United States demand for silver in the arts and industry is nearly three times as much as is produced in the United States, while subsidiary coinage requirements, as noted above, have consumed in recent years more silver than is domestically produced. (See table 1.)

At the present time the United States possesses no reserves of silver such as existed in 1918 and in World War II from which demand from abroad was met. Free silver in the general fund, as shown in table 3, amounted to 97,869,767 ounces as of June 28, 1957. In addition, the Treasury holds a quantity of silver dollars and subsidiary silver coins, totalling 190,569,421 ounces as of June 28, 1957, but this silver, it may be assumed, would be needed to meet domestic circulation requirements.

Aside from these two funds of silver there remains the stock of bullion held against silver certificates outstanding, amounting of 1,708,639,335 ounces as of June 28, 1957.

MEANING OF SILVER CERTIFICATES

The actual status of this silver fund is not generally understood. A popular assumption among monetary theorists and others is that it would be available to the Government to meet its needs in time of war. As the silver is held for redemption of silver certificates outstanding, the assumption is erroneous. Silver certificates are of the nature of warehouse receipts for silver which the Treasury keeps in its vaults as depositary trustee, the title to which rests with United States citizens and others who may be holders of the certificates. Consequently, the silver could not be disposed of by the Government except by an act of confiscation, a default of its trusteeship, and a breach of its moral and legal obligations. Congress might legislate to legitimatize the act, but it could not repair the moral damage. May we remember that among all the moneys of the world the United States silver certificate is the only paper money that is backed 100 percent by the metal that it promises to deliver on demand; is the only money anywhere that has survived two world cataclysms; is the only money that has never been in default; is the only money that has continued redeemable at its tenor at all times. This record represents a value of unique importance among the assets of the Treasury—one that should not be lightly cast away.

SILVER AND THE FOREIGN AID PROGRAM

A repeatedly heard argument for foreign aid is the necessity for the United States to meet the pressing capital needs of the underdeveloped countries. The argument is that these countries are unable to accumulate the capital needed for economic growth because of low living standards and low per capita incomes.

With few exceptions, nearly all the underdeveloped countries today are experiencing a shortage of dollars and other foreign exchange. Yet, during the 19th century, when all these underdeveloped countries employed silver money as the currency and as a standard of payments, they were relatively prosperous and the "wealth of the Indies" became a proverb. They were able to export vast quantities of merchandise, so that Europe was generally in their debt. Thus, during the period prior to World War I, India regularly required about half the world's current production of the precious metals in settlement of balances owing.

Capital formation is not achieved by legislative fear, nor by monetary legerdemain, but is a slow and patient process of setting aside wealth from current income, beginning, as was the historical process in the East, with a coin. When good, intrinsically valuable coin is not obtainable, but instead debased coin or dirty irredeemable, depreciating paper, economic activity aborts, and capital is never formed. Until such a condition is corrected, capital pumped in from abroad by way of foreign aid is sterile.

RECOMMENDATIONS

There is need for silver in the monetary systems of the world just as there is need for both wheat and rice in diet. It is just as unreasonable to sell off the United States silver reserves as it would be to propose that the planting of rice should cease because we have an abundance of wheat, and Americans eat little rice. There are vast populations of the world to whom rice is a standard of the diet, and to whom the American rice production is an important source of supply, and there are vast populations of the world to whom silver has been and continues to be the popular, if not the official, standard of value and means of payment.

The policy which we recommend to your committee, therefore, is a continuance of existing United States monetary policy as stated in the Silver Purchase Act of 1934; the discontinuance of Treasury sales of silver at less than the statutory price; and a policy, in connection with our foreign aid program, of encouraging the underdeveloped countries of the world, to which we are extending technical assistance and counsel, counsel and assistance in returning to their traditional monetary systems, namely a money solidly based upon the precious metals and freely convertible into metals, as the surest bulwark for the savings of the industrious, the protection of honest industry, the guard against speculation and inflation, and the simulus to capital accumulation.

TABLE 1.—*Silver production and consumption*

[In fine ounces]

Year	Production		Consumption in arts and industries		Consumption in coinage	
	World	United States	World	United States	World	United States[1]
1952	215,300,000	39,840,300	140,094,226	96,500,000	114,302,977	57,339,220
1953	221,200,000	37,735,500	158,895,934	106,000,000	91,548,333	42,755,417
1954	213,000,000	35,584,800	133,078,039	86,000,000	83,515,700	53,205,823
1955	221,500,000	36,469,610	188,772,533	101,400,000	52,600,645	8,225,673
1956	230,000,000	37,500,000	204,300,000	100,000,000	56,100,000	31,100,000

[1] Calendar year figures.

Source: Reports of Director of Mint. 1956 figures from Handy & Harmon.

TABLE 2.—*United States mine production of silver, by percent from sources*

Year	Percent from—					
	Placers	Dry ore	Copper ore	Lead ore	Zinc ore	Zinc-lead, zinc-copper, lead-copper, and zinc-lead-copper ores
1945–49 (average)	0.2	25.0	23.6	6.7	1.8	42.7
1950	.2	32.8	19.6	5.1	1.0	41.3
1951	.2	31.9	20.8	4.2	1.8	41.1
1952	.1	31.3	20.6	4.4	2.0	41.6
1953	.1	29.2	24.5	5.2	.9	40.1
1954	.1	39.5	22.0	3.4	1.1	33.9

Source: Minerals Yearbook, 1954.

TABLE 3.—*Free silver in Treasury general fund, and issues*

[In fine ounces]

Fiscal year	Balances at beginning of year, by accounts and total					Issues		
	Silver Purchase Act of 1939	Newly mined (act of July 6, 1939)	Newly mined (act of July 31, 1946)	Silver bullion, ordinary	Total	Used in coinage	Sold to industry and arts[1]	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1947	217, 632, 366	653, 119	.....	699, 488	218, 984, 973	36, 456, 031	191, 721	36, 647, 752
1948	181, 168, 136	765, 646	6, 779, 510	1, 055, 457	189, 678, 749	20, 324, 739	25, 398	20, 350, 137
1949	161, 221, 118	565, 239	16, 223, 260	1, 334, 307	179, 343, 924	26, 588, 660	24, 419	26, 613, 079
1950	134, 631, 387	565, 508	26, 652, 093	1, 455, 154	143, 304, 142	9, 105, 841	28, 767	9, 134, 608
1951	126, 838, 335	541, 173	40, 080, 260	1, 544, 963	169, 004, 731	28, 494, 986	1, 643, 412	30, 138, 408
1952	98, 892, 214	524, 735	49, 381, 799	1, 678, 405	150, 477, 153	54, 858, 943	49, 437	54, 908, 380
1953	64, 291, 654	524, 735	40, 182, 797	1, 756, 924	106, 756, 110	54, 956, 625	37, 283	54, 993, 908
1954	50, 058, 527	521, 772	9, 391, 389	1, 907, 463	61, 879, 151	59, 261, 873	35, 852	59, 297, 725
1955	.....	.....	10, 245, 338	6, 251, 357	16, 496, 695	14, 936, 332	66, 159	14, 992, 491
1956	.....	.....	7, 140, 141	17, 379, 071	24, 519, 212	14, 105, 523	10, 320, 051	24, 425, 574
1957	.....	.....	2, 781, 273	52, 273, 612	55, 054, 885	46, 231, 872	7, 476, 518	53, 708, 390
1958	.....	.....	2, 854, 860	95, 014, 906	97, 869, 767	.....	.....	.....

[1] Figures include operative wastes.

Source: Reports of Director of Mint and Bureau of the Mint.

MANGANESE CHEMICALS CORP.,
Minneapolis, Minn., April 8, 1958.

Hon. JAMES E. MURRAY,
United States Senator,
Washington, D. C.

DEAR SENATOR MURRAY: Because the domestic manganese program is of little true meaning, in the long run, without a process to utilize our country's vast quantities of low-grade ore, we would like to call the subcommittee's attention to what has been accomplished by this company in the past 27 months.

Since January 1956, the company's plant at Riverton, Minn., has been in continuous production. During this period, 123,000 tons of low-grade (6 to 10 percent) Cuyuna Range ore have been processed, and 28,500,000 pounds of high-purity manganese carbonate have been produced. Government purchases of synthetic battery-grade manganese dioxide have been of vital importance to the development of the process, but the only presently existing Government purchase contract will be completed in June of this year.

The development of a process for the extraction of manganese from low-grade domestic ore on a commercial basis represents the culmination of the Government's entire manganese program—provided that the production facility is continued in existence. However, as noted in your subcommittee reports, there are indications that the Government will shortsightedly not take the steps necessary to keep this plant in operation. In addition to the detailed reports submitted to General Services Administration on this particular project, we have furnished a preliminary engineering study based upon the scaling up of the present plant to the level of 10,000 tons a day feed. In a plant of this size, manganese for our steel industry can be furnished from our virtually limitless low-grade Cuyuna Range ores at a price competitive with those currently in effect for imported foreign ores. We are also certain that 70 percent manganese pellet from this process will give many advantages over foreign ores containing 50 percent or less manganese. This has been clearly demonstrated in the taconite process, where they have found many advantages of a uniform high-grade nodulized product over the natural ores.

The cost of the present project to the Government bears a striking contrast to most other such projects. Out of a total investment of $3 million, $2,250,000 has been advanced by the Government to finance both plant construction and all research and development work. To date, $1,236,000 on principal and $496,000 interest has been repaid to the Government.

Under a curtailed purchase program for synthetic battery oxide over only the next 2 years, the entire advance by the Government will be repaid, plus 5 percent interest. The Government will, therefore, have actually made money while, at the same time, accomplishing its long-sought objective of developing a method to utilize domestic ores for the relief of our critical dependence upon foreign imports. A proposal to this effect is now before ODM. Because of the great importance of this proposal in terms of national defense, particularly if rejected by ODM, a copy of that proposal is attached to this letter.

There are two major points which must be constantly borne in mind:

1. The process must be kept in existence and in operation. Otherwise, there is no justification whatsoever for the huge expenditures on manganese matters over the past 30 years.

2. No process for utilization of low-grade domestic ores can compete with high-grade foreign ores unless a sufficiently large plant is constructed.

With Government assistance, both of the above objectives can be obtained.

Sincerely,

B. R. BABBITT,
Vice President and General Manager.

MANGANESE CHEMICALS CORP.,
Minneapolis, Minn., March 4, 1958.

Hon. GORDON GRAY,
Director, Office of Defense Mobilization,
Washington, D. C.

DEAR MR. GRAY: We wish to thank you for the time out of your pressing schedule which you gave to Governor Freeman and to us Wednesday, February 26. The next day we met with Mr. Hughes and other members of your staff. Details of some of the issues raised by Governor Freeman and by Senator Thye in his letter to you of February 14, 1958, were discussed.

The ultimate decision to be made by you goes far beyond either just this company or the Nation's requirements for synthetic manganese battery oxide. It is a decision that will mirror the Government's overall policy in manganese as to making our steel industry "free from dangerous dependence upon foreign sources of supply." (Note appendix A, Bureau of Mines testimony, House Appropriations.) It is, we submit, a major policy decision with far-reaching consequences for National Security and Defense.

This company is prepared to make the following proposal to focus attention on exactly what is required, what the cost will be to the Government and what is to be gained or lost by your decision in terms of our national defense.

PROPOSAL

1. The company will furnish, and the Government will buy for the national stockpile, over a 2-year period commencing July 1, 1958, and ending June 30, 1960, a total of 5,000 long, dry tons of synthetic battery-grade manganese dioxide meeting United States Signal Corps specifications SCL 3175.

2. Deliveries will be scheduled over the entire 2-year period. To provide continuity following completion of the presently existing Defense Production Act contract in June of this year, deliveries will be scheduled somewhat higher in the first year than in the second. Except for this factor, there will be no acceleration possible under the contract.

3. The price will be $0.28 per pound—a price somewhat lower than that currently in effect in the competitive market.

4. The Government will withhold $0.05 per pound, to be applied upon the company's debt to the Government, as determined upon completion in June 1958 of purchases and deliveries under contract DMP–16.

5. The total net cost to the Government is estimated at approximately $2,500,000.

TERMINATION OF STOCKPILE PURCHASES

The company will request no further purchases for the national stockpile unless initiated by the Government as a result of increased goals. In short, this will be the end, and the company is prepared to bind itself irrevocably to this proposition at this time.

DEFENSE OBJECTIVES TO BE GAINED BY THE GOVERNMENT

1. *Freedom of steel industry from dangerous dependence upon foreign sources of supply.*—Without manganese, there can be no steel. In time of emergency, dependency of our steel industry on foreign imports (85 percent of requirements) is critical. The proposed purchases, coupled with increasing industrial sales, will insure continued existence of both plant and its highly trained personnel as the only existing process on a production basis for the extraction of manganese from vast domestic deposits of low-grade ores. In time of emergency, this plant could be easily scaled up to provide manganese for our steel industry, wholly independent of foreign sources of supply and vulnerability of shipping (appendix A).

2. *Justification for the Government's domestic manganese program.*—Over the past 20–30 years, our Government has expended well in excess of an estimated $100 million to find an answer for the steel industry from domestic manganese ore. At no cost to the Government, by contrast, this process has proved that if a large plant is built, utilizing this process, to supply 25 percent of the steel industry's requirements, the price of manganese pellets would be competitive with foreign imports at present prices. That price would be lower than the price of foreign imports at the time of the Suez crisis—of itself an excellent barometer as to what will happen in an emergency. We do not propose that the Government embark on this program now any more than we would ask private capital to make the investment. Economic conditions do not now justify the expenditure. We cannot, however, see any justification for the past, and a continued, Government program in manganese if the Government permits the only end result of its program to vanish.

3. *Maintenance of the mobilization base.*—The largest single domestic component of the mobilization base for synthetic manganese dioxide will be available in event of emergency as "a reliable source of supply" (Pettibone report). Maintenance of the mobilization base was used by ODM as the sole justification for a contract award to American Potash & Chemical Co. in the fall of 1957.

4. *Survival, relief, and rehabilitation.*—In the event of nuclear attack, an adequate supply of battery-grade manganese dioxide for emergency battery production to provide for survival, relief, and rehabilitation will be guaranteed (Pettibone report).

5. *Replacement of Gold Coast ore.*—Upon exhaustion of Gold Coast ores (estimated 3–5 years), a reliable supply of synthetic battery-grade manganese dioxide to meet both military and domestic requirements will be guaranteed. Adequate planning for survival, relief, and rehabilitation requires consideration for domestic needs just as much as for military requirements (Pettibone report). Exhaustion of Gold Coast ores will create a critical shortage in essential industrial and domestic requirements. A synthetic battery oxide is considered by Government technical advisers as the only sure and logical answer.

6. *Research and development.*—Highly trained personnel and a facility strategically located will continue in existence for whatever research and development in the manganese field is desired by the Bureau of Mines, or by other Government agencies, for defense purposes.

7. *Disposal of stockpile surpluses.*—The Pettibone report recommends that "sub-specification-grade metals and minerals should be disposed of, preferably in a manner designed to encourage development of processes for treating low-grade domestic ores." We are in no position to evaluate this factor in the manganese stockpile. We are sure, however, that if our Office contemplates any action to carry out this recommendation, the continued existence of the Manganese Chemicals Corp. process is the only known solution.

REDETERMINATION OF PRIORITY LEVEL

In our meeting with Mr. Hughes, it became quite apparent that the tonnage of synthetic battery oxide established several years ago as the priority level did not then take into consideration two major factors:

1. Demand for batteries, both military and domestic, in event of nuclear attack, for purposes of survival, relief, and rehabilitation.
2. Exhaustion of Gold Coast ores.

We are of the opinion that a redetermination of this goal, taking into consideration the above two factors, will result in a considerably higher goal than now exists. For that reason alone, the proposed purchases would be justified. The

defense objectives above listed would then prove additional benefits to be secured by the Government's defense program at no real cost to the Government.

Both Governor Freeman and Senator Thye have stressed that time is very much of the essence. Delay in a decision by the Office of Defense Mobilization will be tantamount to a decision that all of the above defense factors are to be disregarded, and that there is, in fact, no justification for either the past or present Government programs in the field of domestic manganese. Action predicated first upon your policy decision must be taken prior to July 1, 1958.

Because the Governor of the State of Minnesota, our Senators, and Congressman Blatnik have, from the outset, followed this matter closely, and because we have, of course, over the past 3 years worked closely with other governmental departments which furnished information to the Pettibone committee, we are sending copies of this proposal to those listed on appendix B for information purposes only.

Again, we wish to thank you for your early and serious consideration of the specific proposal submitted in view of the magnitude of the consequences which must inevitably follow from your decision.

Very truly yours,

CHARLES S. BELLOWS.

APPENDIX A

(Excerpts from testimony by the Bureau of Mines at hearings before a subcommittee of the Committee of Appropriations, House of Representatives, as to the Department of the Interior and related agencies appropriations for 1959)

(*b*) *Manganese, $827,000.*—The estimate for this subactivity for 1959 is $827,000 the same as the subtotal. The items deducted in arriving at the subtotal for the 1959 estimates are indicated under the heading "Proposed changes in program" appearing on page 48.

SCOPE OF PROGRAM

Because of its essential use in the production of virtually all steel, manganese is fundamental to the economic and strategic strength of the United States. Domestic production of manganese ore, stimulated by premium Government prices, is only about 15 percent of consumption, and hence the Nation is dependent upon imports for the great part of its needs as it has been traditionally. In view of this state of affairs, all types of scientific and engineering techniques available to the Bureau of Mines are brought to bear on developing from the country's large submarginal resources some measure of peacetime self-sufficiency and all possible self-sufficiency for time of emergency.

MANGANESE

Progress is being made toward eventual large-scale utilization of the Nation's large low-grade and off-grade manganese resources, which must be brought into production if freedom from dangerous dependence upon foreign sources of supply is to be reduced to a more tolerable level. The Bureau's manganese program, which is directed toward achievement of this objective, will include examination, cataloging, and appraisal of the various domestic deposits in order that the metallurgical research can be pursued with knowledge of definite tonnages of raw material of known physical and chemical characteristics; mining reserch to increase the tonnages available for low-cost mining; studies of ore dressing, pyrometallurgical, hydrometallurgical, and electrometallurgical recovery processes; engineering evaluation of the different processes with respect to the various large deposits; investigation of the possibilities for conservation of manganese through improvements in utilization processes and techniques; basic metallurgical research; dissemination of technical and statistical information.

This manganese program is a long-term approach to a difficult problem of prime importance to steel production. A number of metallurgical processes have been determined to be technically feasible for recovery of manganese from large low-grade or off-grade domestic sources of potential supply. One has been in small-scale commercial operation for 3 years. All require additional research

to improve the processes by lowering costs, raising recoveries, improving products, or by adaptation to other products, and by applying the processes to lower grade or more refractory portions of the reserve potential. For its implementation, this program requires the services of a great variety of highly qualified professional and technical personnel.

APPENDIX B

Hon. Orville L. Freeman, Governor, State of Minnesota.
Hon. Edward J. Thye, Senator, State of Minnesota.
Hon. Hubert H. Humphrey, Senator, State of Minnesota.
Hon. John A. Blatnik, Congressman, State of Minnesota.
Mr. R. A. Heddleston, Deputy Commissioner, General Services Administration, Defense Materials Services.
Mr. W. Parker Worrell, United States Signal Corps Supply Agency, Philadelphia.
Mr. Charles Holman, Defense Department, United States Signal Corps, Washington, D. C.

TWIN SISTERS MAGNESIUM & CHROME CORP.,
Seattle, Wash., March 26, 1958.

Re minerals program hearing.

Hon. JAMES S. MURRAY,
Chairman of the Senate Interior and Insular Affairs Committee,
Washington, D. C.

MY DEAR MR. MURRAY: The courageous stand by your committee on insisting that the administration, through its Department of Interior, and the respective House and Senate committees, take immediate steps to correct the serious condition in the western mining industry, is commendable.

During 1957 I supplied your office with much data on the need of the chrome mining industry of a suitable market in order to survive and vigorously protested the long range minerals program by the Department of the Interior as being most inadequate.

Investigations show that individual miners cannot sell an occasional car of chrome, or a portion of a car, to eastern buyers and there is no continued market for chrome ore on the west coast.

I strongly urge enactment of legislation that would provide for a 6- to 10-year purchasing program for chromite ore by the Government at prices comparable to the existing domestic chrome purchasing program at Grants Pass, Oreg., which is nearly complete and will shortly expire.

The Government purchasing chrome ore under present Grants Pass policies and pooling these shipments can guarantee to industry in the East a quantity of two to three thousand tons of ore per month which should be marketable by the Government to industry.

The difference between the price that the Government would pay for the purchase of the ore to the local miner, and the price the Government would receive from industry, would constitute a subsidy or the cost to the Government of sustaining a chrome mining industry and the development and exploration for new chromite deposits.

Programs should be firm for a period of years rather than on a 2-year piecemeal basis in order to give chrome mining companies an opportunity to build roads into remote areas, construct concentrating mills and get their mining properties into actual production on a sustaining and economical basis.

The increased cost in labor, materials, taxes, etc., since the establishment of the Grants Pass chrome purchasing prices, should more than offset any so-called incentive price that was in mind when the Grants Pass program was inaugurated.

How the money is obtained, whether by appropriation or by establishing a tax on the chrome that is imported and used in the United States, is a matter for Congress to decide. A tax on the chrome imported and used would be paid indirectly by the people to purchase products containing chrome. The appropriation method would result in all persons subject to tax paying the same amount of tax, the same as we are now doing to support foreign aid, which is encouraging foreign countries to produce and ship chrome and other ores and metals to the United States for our domestic consumption.

Provisions should be made in the act to provide that the Government can enter into a contract with various mining firms to supply to the Government certain quantities of ore each month over a period of years. This would permit the small miner to secure financing for his mining and milling equipment and plant facilities required for the mining of his claims. Similar contract provisions between Government and industry would permit the Government to guarantee to industry a continuity of supply of chrome ore over a period of years.

This same type of philosophy could apply to other minerals for which the Government is nearly 100 percent dependent on foreign supply at present. I do not propose to speak for any commodity other than chrome, with which I am familiar.

Respectfully submitted,

A. L. ATHERTON,
Executive Vice President.

INTERNATIONAL CHEMICAL WORKERS UNION,
Akron, Ohio, April 8, 1958.

Hon. JAMES E. MURRAY,
Chairman, Subcommittee on Minerals, Materials, and Fuels, Interior and Insular Affairs Committee, United States Senate, Washington, D. C.

DEAR SENATOR: On behalf of the International Chemical Workers Union, I should like to submit the enclosed statement to your committee which suggests a program to aid our domestic minerals industry.

I would greatly appreciate it if you and your committee would give consideration to this program which outlines the position of our international union and which I believe meets the needs of the industry which employs a significant segment of our membership.

With kindest regards, I remain,

Very sincerely yours,

WALTER L. MITCHELL, *President.*

STATEMENT BY THE INTERNATIONAL CHEMICAL WORKERS UNION REGARDING THE MINERALS INDUSTRY IN THE UNITED STATES

The minerals industry in the United States is experiencing serious problems which endanger the jobs of thousands of workers and the survival of many establishments. The number of unemployed in the industry has increased sharply. Several mines have closed; additional shutdowns are threatened.

Although some of the troubles are related to the present difficulties in our economy, in the main the difficulties in the minerals industry are caused by factors that cannot be controlled solely in the United States. The market for minerals is primarily an international one and the price of many minerals is influenced by fluctuations on the international market.

Roughly, the factors behind the difficulties peculiar to the domestic minerals industry can be summed up as follows:

1. Erratic movement of prices;
2. Big mines are low-cost producers; small mines are high-cost producers;
3. Although the United States is an export nation for some minerals, many strategic minerals must be imported;
4. Many ore bodies in the United States are poorer in metal content than foreign ore bodies.

A few giant, low-cost companies may benefit from tariffs and quotas in the form of increased profits. For the small, high-cost mines, however, such programs provide hardly any relief at all. It would appear, therefore, that tariffs and quotas do not solve the problems.

A new solution, tailor-made to the peculiar problems of the minerals industry, is needed. This requires Federal legislation.

The international Chemical Workers Union suggests that a minerals industry agency be established that would be charged with the following responsibilities:

1. To establish an "economic price" for minerals based on the following standards:

Domestic production costs;
Historic price of minerals;
Prices of substitute materials;
Defense and other domestic needs for minerals.

2. To establish a direct subsidy to producers whenever the selling price is below the "economic price."

This subsidy should apply only to a limited, fixed tonnage of any mine, prorating the percentage of average production of each mine to United States needs and requirements. No subsidy should be applied to any tonnage produced during a strike by a duly recognized labor organization.

3. To establish a buffer stockpile of domestic minerals. The Agency will buy the minerals when the market price is below the "economic price." It will sell when the market price is above the "economic price." As a general rule, purchases for the stockpile will increase as prices decline. The Agency will not purchase more than 20 percent of any mine's output in any year. Appropriate restrictions should be set up to prohibit the use of the stockpile in any manner to affect adversely any strike being conducted by a duly recognized labor organization.

4. To establish a readjustment program.

In the event any mine is forced to close, inducements should be offered to new industries to locate in the area. If necessary, full assistance should be given displaced workers for the purpose of relocating in other areas. Such assistance should include—

Special unemployment benefits;

Special assistance in finding other jobs in another area;

Assistance by payment of moving expenses;

Special retraining programs for displaced workers to acquire new skills.

5. To work toward the establishment of an international commodity agreement between exporting and importing countries, based upon the following principles:

Establishment of a worldwide minimum and maximum price;

Establishment of an international buffer stockpile;

Authority to buy for and sell from such stockpile as the worldwide price fluctuates between the minimum and maximum prices;

Agreement to curtail exports when buffer stockpiles reach a predetermined level.

STATEMENT BY CHARLES F. WILLIS, CONSULTANT, ARIZONA COPPER TARIFF BOARD, ON THE ADMINISTRATION'S PROPOSAL FOR A SUBSIDY PROGRAM FOR DOMESTIC COPPER, LEAD, ZINC, FLUORSPAR, AND TUNGSTEN

On April 28, 1958, Interior Secretary Fred A. Seaton—presumably with the approval of the administration—presented to the Senate Subcommittee on Long-range Mineral Program, a proposal for payment of a Government subsidy on production of domestic copper, lead, zinc, fluorspar, and tungsten. These payments would be for a limited amount each year for a 5-year period and the amount of the payments would be the difference between the price received by the producer and the so-called suggested stabilization price.

The recommendations as to stabilization price and maximum yearly quantity were as follows:

Commodity	Stabilization price	Annual limitation
Copper	27½ cents per pound	1,000,000 tons.
Lead	14.75 cents per pound	350,000 tons.
Zinc	12.75 cents per pound	550,000 tons.
Fluorspar (acid grade)	$48 per short ton	180,000 tons.
Tungsten	$35 per short ton unit	375,000 short-ton units.

It is evident that the annual limitation was set at approximately the average domestic production of the respective metals during the period of 1951 to 1956, inclusive. In other words, it was recommended that on these particular metals and minerals the Federal Government would pay a subsidy for a quantity not in excess of the average production for the 1951–56 period.

In the first place, the stabilization prices proposed are entirely too low to permit of the domestic mining industry doing business in the face of present-day wages and other costs. Copper, it is believed, should be not less than 30 cents per pound, lead should be not less than 18 cents per pound, and zinc should be not less than 15 cents per pound. However, such a program, even with the suggested stabilization prices, would not be acceptable to the mining industry.

The mining industry, as well as the taxpaying public, would be opposed to any subsidy program. There is no logical reason, for instance, why the taxpayers should pay a subsidy for copper production in order to keep down the price of the manufactured goods into which copper enters and gives the manufacturers a cost of raw material less than the actual cost. The users of copper products should pay the value of that which they use and it should not be a subsidy from the taxpayers.

Furthermore, if a subsidy program was enacted, and thereby set up as a Government policy, there are a hundred or more other metals or minerals which could justifiably ask the Federal Government to likewise set them up on a subsidy program. They would have just as strong an argument and the extent to which the subsidy program would expand, would be limited to the pressure which could be put upon the Federal Government and Congress by the producing groups. It would make an entirely inequitable situation and would be highly socialistic. It is not necessarily sound economics when "the wheel that squeaks the loudest gets the grease."

Secretary Seaton, in presenting his proposal to the Senate subcommittee made the statement that in the first year the program for these 5 metals and minerals would cost the Federal Government $161,090,000. As a statement to minimize the cost of this program, Secretary Seaton said: "The total annual stabilization payments from then on should diminish as production responds to demand and as our economy resumes its long-term health and vigor." This statement is merely wishful thinking and there is no evidence whatsoever as yet to indicate that we are at the bottom of the slump or that the economy of the country has started a turn upward. There is much talk about the prosperous future that is ahead of us, but nothing to show that we are actually traveling in that direction. There is no justification for the statement that even though the first year's cost would be $161,090,000 it would be less in future years and, if there was further recession, it might be considerably more.

The greatest weakness, however, of the Seaton proposal, is its absolute lack of stability and definite promise that, if enacted, it would be carried out. It would require annual appropriations to provide the funds for carrying it out and there is nothing to assure that future Congresses would make the necessary appropriations and that those who had in good faith set up their production programs would not be left "holding the sack."

We have an excellent example of the potential hazards of such a program in Public Law No. 733, which was enacted by Congress and approved by the President on July 19, 1956. This law provided for a Government purchasing program for tungsten, asbestos, fluorspar, and columbium-tantalum-bearing ores for a period from the enactment of the law to its termination date, December 31, 1958.

Congress appropriated funds for the immediate period following the enactment of this legislation but, when additional funds were sought from the next Congress, there were all kinds of difficulties, uncertainties, and complications, with bitter fights between the House and Senate committees, and with a result that only portions of the proposed program were adequately financed and the Congress denied, unequivocally, any appropriations for a portion of the program.

Tremendous pressure was put upon the Congress by both the administration and the metal producers involved, with an organized effort coming from Members of Congress who were from the States concerned, but to little or no avail.

Those who had set up in good faith to provide the metals and minerals to be purchased had kept on producing, feeling assured that the Government would purchase their products at prices specified by law, and then they found that in the absence of appropriations they were out on a limb and have no method for the recovery of that which they had expended in good faith.

Any program which would depend upon appropriations being made annually by Congress would, in the face of what recently happened in the case of Public Law 733, be considered unstable and not conducive, by those who might supply the needed strategic minerals, to taking the chance that the funds would be forthcoming to compensate them.

Every possible pressure was put upon Congress by the administration to carry out their contract with the producers as authorized by Public Law 733. There is no assurance that, if the proposal of Secretary Seaton be accepted by the present Congress, the next Congress would be willing to appropriate funds to carry on.

The mining industry requires large capital expenditures to do business successfully in a country of high costs and in competition with low-wage-paying coun-

tries, and no "shot in the arm" program such as has been suggested by the administration and Secretary Seaton would be acceptable or successful.

It has been continuously obvious that the administration does not want a tariff program. It is mighty hard to believe that there is any sincerity in the present proposal of subsidies on a selected list of materials. The whole situation makes one wonder if there has not been deliberately created such a confusion that nothing will ultimately be done on the subject.

STRATEGIC MATERIALS CORP.,
Buffalo, N. Y., March 31, 1958.

To the Honorable Members, Subcommittee on Mining and Minerals Industry, United States Senate Committee on Interior and Insular Affairs, Washington, D. C.:

Supplementing the statements made by Dr. Marvin J. Udy and John C. Udd to your committee on behalf of Strategic Materials Corp. last Thursday (March 27, 1958) afternoon, particularly, with respect to the processing of stockpiled manganese concentrates (and further similar acquisitions by the Government) into the finished product ferromanganese, we respectfully submit that:

1. Assuming an average grade of 25 percent manganese in the stockpiles at a cost to the Government of $1.70 per unit and allowing for 85 percent recovery in furnace processing into standard (high carbon) ferromanganese the material feed cost per ton of ferro would amount to about $150. That is only $20 to $30 less than finished ferro is being sold (or dumped) now in certain instances by foreign producers, even though current market quotations for domestic production are around $245 per ton. Furthermore, blast furnace total production cost in this country based on imported standard ores are in the range of $170 per ton of ferro product. Evidently, then under present conditions it is impossible to economically or profitably convert the stockpiles into standard ferromanganese by any method or process if the processor must provide for the Government's cost of the concentrates and finance a plant for the purpose.

We believe that further beneficiation of the stockpile concentrates by any method into an acceptable furnace feed for the production of ferromanganese by standard methods would only substantially add to the cost and loss. The necessary concentration and agglomeration costs together with manganese losses in this procedure would probably add $50 per ton to the cost of the ferromanganese plus the cost of conversion from ore to ferro. The foregoing circumstances and conditions have caused us to consider and to now suggest a method whereby we believe that the Government will take the minimum, if any, loss, and require the least, if any, subsidy for the current program, and enable the stockpiling of manpower, while now available, electric energy, and, importantly also, a finished ready-to-use product.

2. We believe that the direct conversion of the stockpiles into standard ferromanganese by our Strategic-Udy selective reduction process provides the most favorable economically solution to the problem and furthermore would provide a plant for production of ferromanganese from domestic ores in event of need. We think our methods will convert the concentrates into ferro in a manufacturing cost range between $100 and $150 per ton, with least loss of contained manganese and without further beneficiation costs. However, we could not determine exact costs and the required plant capital cost until we had carried a substantial quantity through our proto type plant for the purpose.

3. We therefore suggest that the appropriate agency of the Government ship to our plant about 2,000 tons of blended concentrate from the stockpiles and finance the cost of its smelting by us under the supervision of the Koppers Co., Inc., and technical representatives of the Bureau of Mines for the purpose of obtaining exact economic cost data, plant design data and plant costs. Apart from the cost of the raw material delivered to us, the total cost to the Government should not exceed $250,000 which is very nominal compared to the overall program—its cost to date, and potential savings.

4. Subject to results satisfactory to the Government, we would be prepared to license the process for the specific purpose, or to engage in the direct design and construction of the plant through the Koppers Co., and to operate the plant for a fee or fees to be agreed upon, in the event the Government financed its cost. It is conceivable and even possible that the Government through this suggested method would sustain no actual loss from the manganese stockpiling program.

The plant, owned by the Government, would be a continuing extremely valuable asset that would not necessitate capital return considerations in determining production cost as if owned by private interests. It is possible that manufacturing costs, with a low energy cost location, and a predetermined proportion of product as standard ferro, medium carbon ferro and silico manganese could be brought into a range where such costs added to the original cost of the concentrates at $1.70 per unit would approximate the recent domestic market quotations for such finished products. In addition we believe that the erection of such a plant would enable the continuance of a substantial domestic manganese mining industry that could be maintained with least cost to the Government and with the greatest advantage to the stockpiling objective.

We would be pleased to cooperate in such a program to every possible extent and invite and welcome examination by Government agencies into what we have done and are doing in this field.

Very truly yours,

JOHN C. UDD, *President.*

STATEMENT BY TOM PICKETT, EXECUTIVE VICE PRESIDENT, NATIONAL COAL ASSOCIATION

Mr. Chairman, the bituminous coal industry is most appreciative of the opportunity afforded by your subcommittee to put into the record of these hearings its views on a wide range of issues affecting its competitive status and economic health.

Like many industries, the bituminous coal industry is undergoing a sharp decline in demand for its products in the current recession. In comparison with the first quarter of last year, bituminous coal production in the first 3 months of 1958 was off about 28 million tons, or about 22 percent. This production decrease means that coal companies have lost more than $140 million in gross income so far this year.

The economic dislocation revealed by the foregoing facts is not the preface to a request the the Government take the risk out of the coal business. Nor is it a come-on to a grandiose plan of any kind for subsidizing the coal industry to the extent of its losses.

On the contrary, the bituminous coal industry expects to withstand this period of economic adjustment just as it has similar periods in the past 100 years, without any special ministrations by government.

The coal industry, of all fuels industries, has been hit hardest during the recession thus far. There are several possible general explanations for this. One is that perhaps Federal laws and policies favor competing fuel industries over coal.

The following is a minimum program of desirable changes in public policy and law which would go far toward restoring normal competition in the nations' fuel markets.

A PROGRAM TO RESTORE FAIR COMPETITION IN THE FUELS INDUSTRIES

Government policies extremely damaging to coal's competitive strength are contained in laws and regulations, and sometimes the lack of them, in the following important areas:

1. Natural gas competition, both domestic and imported.
2. Foreign oil imports, including residual oil.
3. Freight rate adjustment.
4. Taxation and tax incentives.
5. A research program for coal.

The competitive force of the bituminous coal industry is also threatened by the possibility that Congress will enact:

1. A premerger notification law.
2. "Good faith" limitation legislation.
3. Public power bills providing total subsidization of atomic energy.

NATURAL GAS COMPETITION

One of the unfair practices permitted under the Natural Gas Act is the dumping of large quantities of gas during off-peak seasons in coal markets at prices calculated to eliminate competition.

Another unfair practice permitted under the act is the direct sale of natural gas to industrial consumers without regulation by the Federal Power Commission.

A third unfair practice allowed by the act is involved in the controversial question of natural gas imports. Several applications are before the Federal Power Commission seeking authorization to import foreign gas. Congress has not provided the Federal Power Commission with adequate statutory standards to guide it in the determination of this important issue.

The Natural Gas Act contains loopholes which make the natural gas industry part public utility and part private enterprise with a two-price system. In its utility status, it enjoys protected markets and guaranteed rates of return with regulated prices. In its private status it is permitted to charge unregulated prices in direct sales to industrial users.

The loopholes permit gas dumping at below cost prices in so-called off-peak seasons, and allow direct sales to industrial users at much lower prices than those which are ultimately charged residential consumers.

Unregulated direct sales of natural gas have at various times been opposed by the FPC, the Office of Defense Mobilization, and was criticized by the 1955 report of the President's Committee on Energy and Resources.

Hence, the public interest and fair fuels industry competition require that off-peak gas dumping be prohibited on the one hand, and direct industrial sales be regulated on the other hand.

Foreign gas imports should not be permitted with impunity, in the interests of national defense and the preservation of United States sovereignty. Foreign gas supply cannot be guaranteed in an emergency; FPC has no jurisdiction over the producer prices of imported gas; there is no United States tariff on foreign gas, whereas Canada, for example, imposes tariffs on both United States gas and coal.

RESIDUAL OIL IMPORTS

Residual oil imports this year are coming in from Venezuela at a rate which suggests that unless they are checked they will amount to 40 to 50 million tons of coal equivalent.

Certain oil-importing companies, through their pricing policies, brought havoc to the coal industry in 1949, 1953, and 1954.

Today they are threatening to do so again. We know from past experience that if the importers are not able to get the business at a reasonable price they will continue to reduce prices to the point where they will be able to maintain their desired volume of shipments at the expense of coal. Since residual oil is a byproduct whose cost already is discounted by the sale of gasoline, importers can sell it at any price that offsets transportation costs.

The effect of this pricing policy and the residual oil importers' ability to make such wide price changes has been close to castastrophic for the coal industry.

Coal producers cannot charge their inland customers higher prices than those charged to customers on the eastern seaboard, where residual oil is competitive. The effect is that if the coal industry makes an attempt to meet residual oil prices along the seaboard, it must then go back to its other customers and reduce prices, thereby lowering the price structure for the entire coal industry throughout the United States.

FREIGHT RATE REGULATION

In February, the Interstate Commerce Commission authorized an increase of 10 cents per net ton on all rail coal freight rates, 15 cents a ton on coke, and 5 cents a ton on lignite. The ICC limited the increase to 8 cents a ton on coal on rates to ports when there is no rail movement from the port following the water haul. The Commission also authorized an 8-cent increase per ton on coal when there has been no prior rail movement. On rail-water-rail movements, the increase ordered by the ICC is 5 cents per net ton to each of the rail factors. No increase was authorized in the rates to ports for export.

Since 1947, prior to the latest tariff increase, coal had been saddled with much higher freight rates than many other commodities. ICC was told that in the 1947–56 period the coal mining industry was compelled to pay a higher per ton-mile increase in freight rates than any other segment of the economy, except miscellaneous manufacturers.

In 1947–56 period freight rates on coal increased 39 percent, whereas on other raw materials rates went up only an average of 34 percent.

It was explained to ICC that in the 10-year period ended in 1957, despite wage increases of 85 percent and freight increases of 43 percent, coal prices have increased only 23 percent, a little more than half the freight increase.

Various other representations have been made to ICC, to discount arguments that the railroads' competition with trucks and water carriers justifies the discrimination against coal in coal's competition with other fuels. It was pointed out that competition between coal and other fuels is competition between the railroads and the pipelines, that every ton of coal lost by the coal industry to oil or gas means a loss in rail revenue to $201 for every carload, and $3.35 a ton at rates in existence prior to the last increase ordered. Freight rate increases drive coal's customers more and more to other fuels.

Despite these arguments, ICC has awarded the railroads substantially what they have asked for. The overriding consideration of ICC has been that the railroads needed the additional revenue.

The bituminous coal industry does not deem it fair or just to compel the coal industry to pay disproportionately high freight rates to enable the railroads to meet other kinds of competition.

Accordingly, the bituminous coal industry recommends that the Interstate Commerce Act be amended to provide that ICC, in its ratemaking function, shall (1) require all users of rail transportation to pay their own way; (2) refrain from considering the effect of new railroad freight rate on traffic of any other mode of transportation, or whether a new proposed railroad rate is lower than necessary to meet the competition of any other means of transportation; (3) give due consideration to the effect of rates on the movement of traffic by the carriers for which the rates are prescribed, including but not limited to the effect of rates on the market competition encountered by shippers and receivers; (4) place the burden upon the carriers to prove that their operations are economical and efficient and that additional revenues sought are required to maintain or improve services.

TAXES AND TAX INCENTIVES

In taxation, the Government has recognized the principle of the depletion allowance for more than 40 years. The reason for a depletion allowance is that minerals and mineral reserves are wasting assets, and companies engaged in mineral extraction should be permitted to deduct from taxable income an allowance sufficient to allow the taxpayer to search for and replace his depleted assets. For some time, the depletion allowance for all minerals was limited to 5 percent of gross income. Subsequently and at various times, some industries were granted higher depletion allowances. The oil industry now has a 27½ percent allowance. Most mineral industries are permitted at least a 15 percent allowance. The coal industry, however, has an inadequate allowance of only 10 percent. All minerals, of course, are limited to 50 percent of the net income from the property.

There is no justification for the wide disparity between the depletion allowance for oil and that for coal, to say nothing of the disparity between other mineral industries and coal. We are pleased to note that a recent report of the Special Subcommittee on Coal Research of the House Committee on Interior and Insular Affairs recommended that "to encourage concurrent scientific research and development in the production, transportation, and utilization of coal within the industry. * * * Congress act to bring about a more equitable depletion allowance rate for the bituminous coal and anthracite industries."

Another tax which has had a seriously debilitating effect on our industry is the 4 cents per ton tax on the transportation of coal. The inequity of this tax is generally recognized and we urge the Congress to repeal it.

If coal is to continue to be a large economical source of energy in the years ahead, it must open up new mines and provide these mines with the best of mechanized equipment. This will take a lot of money. Inequitable tax policies are making it difficult for the industry to raise this money.

THE NEED FOR COAL RESEARCH

The Federal Government should in the public interest expand its support of research and development in the coal industry. In a report transmitted to the House of Representatives on August 27, 1957, the Special Subcommittee on Coal Research of the House Committee on Interior and Insular Affairs had this to say about the problem:

"An adequately financed coal research and development program, if so organized and directed as to concentrate intensive research efforts on promising short-range possibilities for developing new and more effective uses fo coal, for improving and expanding present uses, and for reducing the cost of coal production and distribution, could be expected to produce substantial results highly beneficial to the coal mining industry, to consumers of coal, to coal-mine workers, to distressed coal mining communities, and to the general public. The economic security of the United States would be enhanced. Therefore, it would be in the national interest for the Federal Government to undertake the financing and management of such a program without delay."

According to a United States Bureau of Mines study, $17,382,400 was spent in 1955 on research in coal. Of this amount, approximately $2.5 million was spent by commercial coal operators; $1.2 million by captive coal operators; and $3.2 million by equipment manufacturers. We feel very strongly that these expenditures were inadequate. However, it should be remembered that the coal industry contributed these sums to research at a time when its profit margin was exceedingly low. Furthermore, the components of our industry, in the main, are largely small. Therefore, the accumulation of any large sums for research, whether in 1955 or in any other years, would be a practical impossibility.

When compared with the amounts being spent in other industries, in fact in industries that are directly and effectively competitive with coal, the money spent in coal research is like a drop in the bucket. In some of the industries which are competitive with coal, as a source of energy, we find the United States Government contributing substantially to the bill for research. To enable coal to meet the challenges of the future, we most heartily endorse the recommendations of the House committee for a Government research program.

PREMERGER NOTIFICATION

Premerger notification legislation now before Congress should not, in the opinion of the bituminous coal industry, be enacted.

Such legislation would be particularly burdensome to the coal industry because: (1) There is no exemption in the proposed measure that covers the industry's stock in trade—the acquisition of coal lands: (2) the legislation is unnecessary to preserve competition in the bituminous coal industry with its 5,500 highly competitive operating companies; (3) the legislation would impose public-utility-type obligations on private-enterprise organizations.

There is no demonstrated need for expanding present controls over corporate mergers. The burdens which such legislation would impose on business, Government, and the public far outweigh benefits claimed by proponents.

GOOD FAITH BILLS

The coal industry is opposed to legislation which would remove from the antitrust laws the "good faith" defense available to the seller who has lowered prices to meet competition.

NCA urges rejection of pending legislation on the grounds that it would (*a*) encourage rigid and inflexible price levels; (*b*) seriously impair the ability of the coal industry to meet competition from foreign residual oil: (*c*) create needless doubt and confusion with respect to lawful conduct of day-to-day business of the coal industry; and (*d*) encourage and sustain monopolies rather than preserve competition.

ATOMIC ENERGY

We in the coal industry are interested in the atomic energy program not only because atomic energy is another source of fuel, but also because AEC is a substantial customer of coal.

We are concerned, however, over the Gore bill, S. 3000, which appears to be directed toward a crash program in the industrial utilization of atomic energy to generate electricity.

We would be ill advised to enter upon a Government-subsidized nuclear reactor program because—

1. There is no great demand for nuclear power in the United States. The costs of nuclear powerplants have proved to be appreciably higher than estimated.
2. There is no demand for nuclear power in the United States; the demands for which cannot be met by the use of conventional fuels.

3. There is no assurance that reactors constructed under a crash program would be more economical than coal-fired system now in use.

4. Nuclear systems have a high obsolescence factor in their present early stage of development.

We in the coal industry recognize that there are substantial demands abroad for electricity derived from atomic energy. We understand this demand exists because of less plentiful supplies of coal.

The committee is reminded that the National Coal Association has favored a reasonable and orderly research and development program for civilian atomic energy to demonstrate whether it is economical. We also favor giving technical assistance to nations that have power shortages.

From the foregoing, it would appear that the coal industry is asking a great deal of Congress in the way of remedial legislation to restore competitive vigor. A great deal of help is needed, yet most of coal's present and most urgent recommendations are contained in a February 1955 report of the Presidential Advisory Committee on Energy and Resources.

The bituminous coal industry regards the recommendations of the President's Committee as a logical basis for a reasonable national fuels policy.

The salient recommendations of the Energy and Resources Committee were:

The complete cycle of natural gas production should be appropriately regulated.

Sales of natural gas below cost plus a fair proportion of fixed charges which drive out competing fuels constitute unfair competition and are inimical to a sound fuels economy.

The domestic fuels situation would be so impaired as to endanger the orderly industrial growth which assures the military and civilian supplies that are necessary to the national defense, if the imports of crude and residual oils should exceed significantly the respective proportions that these imports bore to the production of domestic crude oil in 1954. Otherwise, there would be an inadequate incentive for exploration and discovery of new sources of supply.

To maintain coal's vitality as an instrument of national defense by improving currently its ability to compete with other fuels, the railroads by voluntary action, and in absence thereof, the Interstate Commerce Commission by compulsory order, should adjust freight rates to the extent necessary to remove the excessive and disproportionate contribution that coal rates are making to meet the cost of other unprofitable services of the railroad industry. Train load rates should be established to reflect the lower cost of such service.

Present tax provisions on coal, oil, and gas production have been an important factor in encouraging development of energy sources, and further analysis and study from time to time should be made to review the amount and method of making such allowances to maintain proper relationships with continuing changes in other features of the tax laws.

"We recognize that coal is a great national asset and endorse a cooperative study to determine what research and development should be undertaken. The coal industry and both Federal and State governments should participate in this study and its cost."

The Government should urge foreign governments to reduce unnreasonable discriminatory restrictions against imports of United States coal.

The Government, when making foreign loans, should use its best efforts to obtain provisions to prevent discrimination against United States coal. Discrimination would be judged to exist when United States coal imports are disallowed despite its availability at costs no higher than foreign coal.

The Government should expedite efforts to establish credits through the Export-Import Bank to foreign banking institutions in countries where there is reasonable prospect for repayment so that American coal exporters can offer more competitive payment terms to foreign customers.

Where United States coal can be supplied competitively with other available coal, the Government should use its best efforts to enlarge the participation of United States coal in the foreign aid program.

The Government should compensate for higher shipping costs when incurred as a result of the requirement that 50 percent of all shipment be in United States ships at fair and reasonable United States market rates.

May I reiterate in closing, gentlemen, that the bituminous coal industry asks only fair competitive laws and policies from the Government. Then, America will see a vigorous coal industry, one that will fulfill the demands that will be made upon it to supply the increasing fuel needs of an expanding national economy.

STATEMENT OF RUSSELL B. BROWN, GENERAL COUNSEL, INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

The Independent Petroleum Association of America is a national organization representing independent producers of crude petroleum and natural gas and includes royalty and landowners with membership located in every oil producing area of the United States.

This statement is limited to the effect excessive imports have on the domestic petroleum industry and consequently the national economy, including United States defenses.

Since 1929 the Independent Petroleum Association of America has concerned itself with this problem of excessive oil imports. The same philosophy which prevailed in 1929, that is, to save our own oil and use foreign oil, is still prevalent in some Government and industry circles. However, world activities and the role petroleum has played in those activities have, to a great extent, tempered this philosophy with a realization that the United States must have a strong domestic petroleum industry if it is to survive as an economic and security bulwark of the free world.

Prior to enactment of the original Trade Agreements Act in 1934 Congress placed an excise tax on petroleum imports at one-half cent per gallon on crude oil, kerosene and fuel oil; 2½ cents per gallon on gasoline, and 4 cents per gallon on lubricating oil.

These excise taxes were approved in 1932. Two years later Congress passed the first Trade Agreements Act, admonishing, however, that the authority given the President did not include the right to reduce or increase any excise duty.

Despite this admonition carried in the report of the House Ways and Means Committee of the 73d Congress, actions were taken by the Executive which did reduce these excise taxes to ineffectiveness.

Through a series of trade agreements, starting with the Venezuelan Agreement in 1939 and followed with the Mexican Trade Agreement in 1943, a multilateral agreement in 1947 and a renegotiation of the Venezuelan Agreement in 1951, these excise taxes which had held foreign oil imports in check were decimated.

Included in the Trade Agreements Act are certain relief measures intended to safeguard vital domestic industries against destruction by excessive imports. Among those were the peril-point system and the escape clause.

Through experience, however, the domestic petroleum industry has found that as a result of ineffectual administration these safeguards have been converted to the status of handrails for excessive imports.

As an example of administrative abuses, in February of 1949 the Independent Petroleum Association of America filed a petition with the United States Tariff Commission for relief under the escape clause from a damaging and rising tide of oil imports. Its petition for relief was rejected, however, on the grounds that there had been "some scaling down of both production and imports." As a matter of fact, there was no "scaling down" of imports which were increasingly excessive year after year prior to the petition and have continued to increase continuously since the rejection of that application.

A further example of administrative abuse: In 1951 the United States set about to renegotiate the 1939 Venezuelan Trade Agreement. Under the peril-point provision, the Tariff Commission held hearings to determine the peril point for oil import duties, below which serious injury may result to the domestic oil industry. At this hearing, IPAA urged that no further reductions be made in the excise tax on petroleum imports and that the excise tax levels established by Congress in 1932 be restored in order to avoid further serious injury to domestic oil producers.

As a result of the hearing, the Tariff Commission divided equally on the proper peril point for oil imports.

The executive department, however, ignored the peril-point findings of both groups of Commissioners and in fact established its own peril point which was lower than the peril points set by either group of the Commissioners.

Thus, again congressional mandate for protection of a domestic industry was ignored.

The misapplication of the Buy American Act is another prime example of the executive branch reversing the intent of Congress to fit its own ends.

The law requires the Federal Government, when making purchases for public use to give preference to domestic produced products if the product (crude oil in this instance) is produced "in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality."

On April 5, 1954, the General Services Administration issued a directive which, among other things, said:

"Buy American exemption: The regional director, region 7, General Services Administration, having been duly authorized thereunto, has determined that crude petroleum is not produced in the United States in sufficient and reasonably available commercial quantities and, therefore, has exempted from the Buy American Act petroleum fuels and petroleum lubricants."

In 1954 the domestic petroleum industry had a shut-in producing capacity of some 2 million barrels a day, or 25 percent of crude oil productive capacity.

GSA later modified this exemption so as to apply only to the east coast, although there is no basis to be found in the law permitting the Government to apply the Buy American Act on a regional or areawide basis.

GSA further compounded the act by declaring in its directive:

"In addition, imports serve to maintain a flow of foreign crude into this country. If this flow ceases a marketing pattern for foreign crude would develop which would make it difficult or unduly expensive for this country to acquire supplemental crude when and as needed."

Thus the Buy American Act was reversed from its original intent of protecting domestic industries to one of giving preference to imports.

The Department of Defense in purchasing military petroleum supplies has also disregarded the Buy American Act with the result that vast sums are being expended for foreign petroleum products and increasing volumes of such foreign oil is being imported into the United States at a time when the domestic industry is suffering from a serious oversupply.

The records show that year after year the Department of Defense is purchasing a larger share of its total petroleum requirements from foreign sources and importing increasing amounts into the United States. We have been endeavoring to correct this situation but with no success.

At present, GSA and the Department of Defense are reevaluating their applications of the Buy American Act in the light of the latest report of the President's Special Committee To Investigate Crude Oil Imports which linked the Buy American Act to the Government's voluntary oil import program.

The petroleum industry has always recognized the importance of international trade to the economy and safety of the United States. The industry as a whole agrees there is a proper place for oil imports which will supplement but not supplant domestic production.

However, petroleum's role in total United States trade has, since 1934, increased beyond all proportion of supplementation. In 1934, the year the Trade Agreements Act was formalized, oil provided $36 million or 2.2 percent of our total imports. In 1956, oil provided $1.3 billion or 10.2 percent of our total imports.

In 1957, petroleum imports comprised the greatest single commodity import in dollar value, surpassing coffee for the first time. The United States produces no coffee and must rely on other nations for that commodity. In 1957, the domestic petroleum industry had an excess producing capacity of more than 3 million barrels daily.

The importation of commodities which are not produced in the United States is recognized as necessary for the betterment of our life. However, the importation of commodities to the detriment of essential domestic industries was never intended by the original proponents of the Trade Agreements Act.

When the Trade Agreements Act was extended in 1955, the legislative history shows that the Congress considered the domestic petroleum industry was being threatened by excessive imports. That determination had as its basis a report of a Cabinet Advisory Committee on Energy Supplies and Resources Policy appointed by the President.

The Committee had determined that imports of crude petroleum and petroleum products could be deemed a threat to our Nation's security when they exceeded the ratio which they bore to domestic production in 1954.

This was the basis of the 1954 ratio. It was founded after intense study by a Cabinet committee and accepted by Congress in its deliberations in 1955 on extension of the Trade Agreements Act, particularly with respect to the Defense Amendment (sec. 7) of the Trade Agreements Extension Act of 1955. That Congress intended the 1954 relationship be the foundation of the defense amendment as applied to oil is reflected in the debate, and in joint statements made, in one instance by 26 Members of Congress, and in another by 31 Members of Congress.

Despite the Committee report and the intent of Congress that the 1954 relationship be the national security standard as applied to petroleum, oil imports have continued the long history of increasing more and more each year, now substantially exceeding the 1954 ratio. The following table shows this history:

United States petroleum imports, crude oil production and relationship of imports to production, 1936–57

[Imports and production in thousands of barrels per day]

	Petroleum imports				Crude oil production	Ratio of total imports to production (percent)
	Crude oil	Residual fuel oil	Other products	Total		
Prewar average: 1936–41	89	66	16	171	3,474	4.9
War average: 1942–45	99	78	32	209	4,301	4.9
Postwar:						
1946	236	122	19	377	4,751	7.9
1947	267	149	21	437	5,088	8.6
1948	353	146	15	514	5,520	9.3
1949	421	206	18	645	5,047	12.8
1950	487	329	34	850	5,407	15.7
1951	491	326	27	844	6,158	13.7
1952	573	351	28	952	6,256	15.2
1953	648	360	26	1,034	6,458	16.0
1954	656	354	42	1,052	6,342	16.6
1955	782	417	49	1,248	6,807	18.3
1956	934	445	57	1,436	7,151	20.1
1957	997	475	73	1,545	7,175	21.5
1st half 1958 (estimated)	940	500	75	1,515	6,500	23.3

Source: U. S. Bureau of Mines.

That the 1954 relationship was a wise one is found in the declining activities of the domestic petroleum industry since 1954, the last time imports were maintained at that level.

In 1954, the average number of exploratory crews, which are the bellwether of the petroleum industry, active in the United States was 713. In 1955, this activity declined to 666. By 1956, the activity had dropped to 624, and by last year the number of crews in the oilfields was 580. It is often several years before a decline in this activity will be reflected in other facets of the industry's producing operations. However, from 1956 to 1957 the number of wildcat wells drilled in the United States declined nearly 10 percent, and the number of development wells drilled during this period dropped more than 6 percent.

The number of rotary rigs active in the United States decreased in 1957 by 7 percent and during the first 3 months of this year that decline had reached more than 19 percent as compared to the same period in 1957.

During the years 1955 to 1957, oil imports increased from 1,052,000 barrels daily in 1954 to 1,248,000 in 1955, to 1,436,000 in 1956, to 1,545,000 in 1957. Thus as imports of foreign oil increase, the domestic petroleum industry declines.

In July of last year, the President recognized that oil imports were threatening to impair our Nation's security and ordered into existence, upon the recommendation of his Special Committee To Investigate Crude Oil Imports, a voluntary import limitation program.

This program, applied to crude oil only and not to products, has brought about some reduction in crude imports. In other words, crude imports are not as high as they perhaps would otherwise have been, but total imports continue to substantially exceed the 1954 ratio as is shown in the table above.

The present voluntary approach to the problem of excessive imports leaves to the discretion of individual companies whether or not the national security shall be safeguarded. It delegates to private parties the responsibility which Congress delegated to the President when it passed the defense amendment.

Historically, this Nation has been secure and self-sufficient in petroleum supplies so vital to an expanding economy and defense. However, if oil imports are permitted to continue to absorb a larger and larger share of the home market, the domestic petroleum industry will be weakened to such an extent that dependency on foreign oil will no longer be a matter of choice, but a grim necessity.

The President's Special Committee To Investigate Crude Oil Imports stated in its report of July 29, 1957:

"It is clear that there is a direct relationship between the Nation's security and adequate and available sources of energy. Oil and gas account for two-

thirds of all the energy that is consumed in this country. Furthermore, there is no adequate substitute in sight for the foreseeable future. Therefore, we must have available adequate supplies of oil.

"We have concluded, for reasons that are set forth later in this section of the report, that if we are to have enough oil to meet our national security needs, there must be a limitation on imports that will insure a proper balance between imports and domestic production."

The record of oil imports increasing year after year throughout the period since World War II and the present evidences of serious deterioration of the domestic industry, together with the failure to bring imports within the 1954 relationship as contemplated by Congress in adopting the defense amendment, makes clear that further legislation is now necessary.

We recommend and urge that the Congress adopt the Ikard bill (H. R. 11781) which would limit oil imports to the 1954 relationship.

JOINT STATEMENT BY DAVID J. MCDONALD, PRESIDENT, UNITED STEELWORKERS OF AMERICA AND ELWOOD SWISHER, VICE PRESIDENT, OIL, CHEMICAL AND ATOMIC WORKERS INTERNATIONAL UNION

The seriousness of the situation in the metal-mining industry needs no elaboration before this committee.

The current recession has obviously played a significant role in aggravating the economic conditions of the whole metal-mining industry. Specific segments have been directly affected by declines in certain sectors of the economy. For example, the lead and zinc industry has been hurt by the drop in automobile production, now down one-third from last year. Copper consumption is curtailed when housing construction declines. In addition, other industries producing key, important minerals and metals, which are used either in construction or durable goods production, are adversely influenced by overall declines in basic economic activities.

However, certain segments of the metal-mining industry would face serious problems regardless of the recession in the economy.

It is quite clear that the instability of world prices for these metals causes great fluctuation in both foreign production and American imports.

Whether the import situation would present such a serious problem if domestic consumption were at high levels is a speculative issue. However, many have considered imports an important factor in the deterioration of conditions in the metal-mining industry. As a result, various proposals have been offered to help the industry by tackling only this one aspect of the problem, import competition:

One suggestion is the excise tax proposal for imports, considered by Congress last year. Another is the current decision and recommendation of the Tariff Commission, dated April 24, which reports a finding of serious injury, specifically in lead and zinc. As a result the Tariff Commission has recommended 1930 tariff levels. Three of the Commissioners have also recommended even higher tariffs and the imposition of quotas. There is legislation before the Congress which would impose quotas or a quota approach on the imports of many metal and minerals.

These proposals, and others which are currently considered, are based on the assumption that the metal-mining industry would show substantial recovery if competition from imports were reduced or removed. This assumption is at least questionable.

There are additional factors to be considered. Imports come from many nations which are considered close allies of the United States and from our immediate friendly neighbors to the north and south. Canada, Mexico, Chile, Bolivia, Peru, Australia, Rhodesia, Brazil, Africa, and India, to mention only a few, send metals to the United States. Certainly any action taken by the Congress to alleviate the conditions of the metal-mining industry should not ignore or interfere with continued friendly relations with these many nations.

While the United States cannot ignore these international implications, neither can the situation in the domestic industries be sloughed aside or treated lightly. The conditions in these domestic industries, the suffering of the workers, and the plight of the communities where the mines are located require action. This Nation cannot allow any of these three—the industry, the worker, or the community—to continue to suffer from the depressed conditions now so prevalent.

We would like, therefore, to suggest an appropriate program to alleviate the present distress and to provide future stability in the metal-mining industry.

Since this is a flucuating industry, continually changing its pattern and direction, the program is made up of 5 points designed to stabilize conditions in the industry. Each blends into the other to provide a suitable overall approach. Nevertheless, the division of the points in the program is appropriate for separation into short-term and long-range action. The serious condition of the metal-mining industry necessitates immediate action. Yet it is essential that Congress consider simultaneously the immediate and long-run steps. The first two parts of the program could be enacted pending the consideration of the long-run aspects of the program. All five points, however, are part of a package designed to stabilize the metal-mining industry.

1. Certain of the more important key minerals should be stockpiled—not necessarily for defense purposes, although that certainly must and should be a consideration. A buffer-stockpile concept should be developed. A Federal Government agency should buy minerals when the market price drops. The agency should sell when the market price rises. This means, of course, that as a general rule purchases for the stockpile would increase as prices decline and, conceivably, would decrease as prices rise.

The agency should not purchase more than 20 percent of any mine's output in any one year.

Certain safeguards must be imposed in the establishment of a buffer stockpile, particularly if the agency is to be authorized to sell from the stockpile when the prices are high. Therefore, appropriate restrictions should be set up to prohibit the use of the stockpile in any way which would interfere with a labor dispute.

2. Any program, whether short or long range, will result in certain high-cost, inefficient mines being forced to close. In such cases, an adjustment assistance program (such as that contained in the Trade Adjustment Act, S. 2907, introduced by Senators Kennedy, Humphrey, and others) should be put into effect. This would permit aid and assistance to be given to the workers, to the mines, and to the communities in the transition period.

In addition, the area economic development bill, introduced jointly by Senators Douglas and Payne, S. 3683, would offer vitally needed aid to help the adjustment of communities faced with mines having to close because of their high cost.

These suggested programs—for a domestic buffer stockpile and a readjustment program—are, of course, only immediate palliatives designed to assist the present situation.

The operation and the need for a buffer stockpile program could be greatly minimized if the minerals industry could be stabilized, if prices, production, imports, and consumption could somehow be brought into balance. It is with the hope that the minerals industry can be stabilized that these additional three points are proposed:

3. Exploration and development aid should be continued and extended. The Defense Minerals Emergency Administration should be replaced by a permanent division of an overall defense minerals agency that could give development and exploration aid on a dollar-matching basis.

The need for continued exploration and development of new mineral sites and deposits in the United States needs no elaboration or discussion. This is an essential aspect of a healthy and continually prosperous industry. Without exploration and development programs, old mineral deposits are worked out, the quality of the ore declines, and the mines are worked out.

4. A system of direct subsidies to producers, whenever the market price is below a predetermined economic price for the industry, should be established. This economic price should be based upon the following standards: domestic production costs, historic price of minerals, prices of substitute materials, and defense and domestic needs for minerals, in terms of a predetermined mobilization base. The economic price, which is really the base of this program, should be set at a level to maintain domestic production of the amount necessary to fulfill the mobilization base requirements of the United States.

The subsidy, based upon this predetermined economic price should apply only to a limited, fixed tonnage of any mine. This is essential in order to avoid windfall profits to the large, efficient producers. Such fixed tonnage should start with a floor and be graduated upward on a sliding-scale basis, prorating the percentage of the average production of each mine to United States needs and requirements.

In effect, this is a limited tonnage subsidy. But the limited tonnage should start with a minimum level tonnage, to be subsidized, regardless. This takes care of the small producers.

Other mines would have a portion of their production subsidized based upon a sliding scale amount that relates each mine's production to total United States consumption in a specific base year. The subsidy would be designed to maintain that ratio and would apply only to that level of tonnage necessary to maintain that ratio.

All subsidies paid must be on domestic production for domestic use solely.

5. The United States Government should be immediately authorized to work toward the establishment of an international commodity agreement between exporting and importing countries, based upon the following principles:

(*a*) Establishment of worldwide minimum and maximum prices.

(*b*) Establishment of an international buffer stockpile.

(*c*) Authority to buy and sell for such stockpile, as worldwide prices fluctuate between the minimum and the maximum prices.

(*d*) Agreement to curtail exports when buffer stockpiles reach a predetermined level.

(*e*) Impose necessary safeguards to prohibit the use of the stockpile as a means of interfering with labor-management relations.

International commodity agreements are more and more essential if worldwide production is to be stabilized and if the world is to be prevented from returning to a dog-eat-dog system of quotas and tariffs. The multilateral determination of production levels in relation to world needs, the establishment of worldwide economic prices, and the use of a buffer stockpile to augment these concepts are all in the interest of stabilizing world production and avoiding cat-and-dog fights between nations.

In order to effectively carry this five-point program, there should be established a Domestic Minerals Agency in the executive department of the Government which would be created and empowered to carry out the various domestic and international implications of these suggested programs.

STATEMENT BY WILLIAM MEYST, SECRETARY, CONTINENTAL COLUMBIUM CORP.

Gentlemen, this statement is being made for the purpose of recommending and urging the inclusion of columbium-tantalum in the proposed extension of Public Law No. 733. Briefly, our reasons follow:

1. NEED—USES

A great deal of material has been forthcoming in recent months concerning the growing use application for columbium (this firm's particular material) in a number of important fields. Some of its significant present and potential uses are here listed, and are outlined in more complete detail in the attached exerpts from Stockholders Report No. II attached hereto and made a part hereof:

1. Atomic reactor cores
2. Jet engine parts
3. Stainless steel alloys for heat and corrosion
4. Superaluminum alloys
5. Cryatron
6. With uranium in fuel elements
7. Jet engine burner tunnels
8. Skins for supersonic missiles
9. Ram jet tailpipes
10. Roundels
11. Pressed electrodes
12. Carbide products

Many others are pending, but some characteristics which make columbium desirable are ductility, its main property, heat and corrosion resistance, neutrality to fission products. To quote from October 1957 Industrial and Engineering Chemistry, page 43A, "Ferroniobium and ferroniobium-tantalum are used to stabilize stainless steel. They prevent carbon precipitation, improve strength at high temperature, and inhibit intergranular corrosion. Niobium monocarbide has the ability to form solid solutions with other refractory metal carbides. In this capacity, it is used with other carbides in the manufacture of cutting tools. * * * The high electrical resistivity of niobium borides makes them excellent bodies for internal resistance or inductance heating. High reflectivity and low volatility make them useful as radiation shields. Also they are good for use under abrasive conditions due to the fact that they retain relatively well their hardness at high temperature."

2. SUPPLIES: 90 PERCENT IMPORTED HERETOFORE, DOMESTIC OUTLOOK NOW GOOD

Our second reason is based upon the fact that this firm has been actively working for nearly a year on a very promising prospect in western Montana and now has on lease 80 claims (more contracts pending), from which careful engineering and exploration indicate we shall be able to produce after milling starts (approximately October 1958) about 2,000 pounds of 40–60 percent columbium concentrates per day, plus rare earths. It is anticipated that this 100 ton per day operation would employ some 35 men in an area which sorely needs revenues. This will also make available a reasonable amount of domestic reserves of a good grade of columbium, assuming our continued exploration reveals the ore bodies indicated by the work already commenced. Our property leases are extendable to 30 years as we believe that materials in veins in sight will produce for many years. Competent engineers' reports are available for study by parties concerned as are records of expenditures for work done to date.

In conclusion, I wish to again urge that for the reasons outlined herein this subcommittee include the columbium-tantalum purchase program in the proposed extension of Public Law 733.

PRESIDENT'S REPORT TO THE STOCKHOLDERS

Report No. 2, January 1, 1958

DEAR STOCKHOLDER: This being midwinter, activity is somewhat slowed down at our Montana operations. We are still working 3 individual 2-man shifts in the underground mines, however, even though the area is completely snowed in as far as other activity is concerned.

Since my last report to you on October 1, 1957, we have completed the miners' camp. We have cut and have on hand 100,000 feet of mill lumber ready for construction this spring. We have a qualified man in the field trying to locate a suitable mill that can be purchased outright. If a suitable complete mill cannot be located then we must locate and purchase the various pieces separately, which is no particular problem.

It is our plan to have the heavy machinery for a 100-ton mill at the mill site by early spring, with construction to begin as soon as the weather permits.

There are four fundamental parts to our program that I wish to point out.

1. The development of sufficient ore of economic value to justify the installation of a milling plant for the beneficiation of our ore. Our development program embraces four groups of claims now held under lease. The exploration already done on these claims has established substantial bodies of ore, and we are adding more to our reserves with each day's operation. Besides the veins now being worked there are several other exposed veins laid out ready for development.

2. The development of a flow sheet is of paramount importance to our project. There is an absolute necessity of a milling plant adapted particularly to the complex character of our ore. We have two valuable constituents in our ore, columbium and rare earth oxides. They must be concentrated and segregated for shipment to the industry.

3. Next is the construction of a 100-ton mill, the design of which must be determined from metallurgical work on our ore. This metallurgy has been completed by the Sill Laboratories and the mill design is now determined. Plans are being prepared.

4. Arrangement for the sale of these materials on the market must be made in advance. We are making good progress along this line. The following is an excerpt from a letter of Dr. C. F. Hiskey, vice president of Transition Metals & Chemicals, Inc., Wallkill, N. Y.

"We are presently readying our plant for the production of columbium pentoxide. By the end of this month we plan to go on to the construction of a reactor which will process roughly a ton a day. There is no reason why you shouldn't get all our business for the oxide plant and for the alloy manufacturing plant as well.

"At the present time most of this ore comes from Nigeria. There is a great need for an American supplier and I believe the United States Government recognizes that. My information is that there is a 100 percent bonus still in effect for the American columbite producer."

We also have some very favorable letters from other users of this material. I do not feel at liberty to further discuss this point now while negotiations are

being carried on with several large corporations to handle our product. We have every reason to believe that the result of these negotiations will be extremely beneficial to our corporation.

From this point on, barring some catastrophe, it should be simply a matter of additional development and a little arithmetic to visualize the future of our corporation.

I was asked recently by one of our stockholders as to just exactly what is columbium and rare earths, and for what is it used. Perhaps others of you are not informed about this as much as you would like to be so I am going to include in this report some articles, and excerpts from articles, found in various publications that you might get a better idea as to just what this material is and what it is being used for, as well as the indicated future for it.

Columbium is a chemical element, symbol Cb (formerly called niobium and in some circles still called niobium). This rare, gray, lustrous, ductile, and malleable metal was discovered in 1801 by the English chemist, Charles Hatchett.

Columbium does not occur in the free state, and its minerals are relatively rare. It is generally found with tantalum as the columbates and tantalates of calcium, iron uranium, manganese, and the rare earths. The two metals are separated by taking advantage of the different solubilities of potassium fluotantalate and potassium fluocolumbite. Columbium is malleable and ductile, and very resistant to corrosion, withstanding the action of the common mineral acids, including aqua regia.

An alloy containing 0.15 to 0.8 percent of columbium is used in engine parts which are subjected to extremely high temperatures.

A columbium electrode acts as an electrolytic value, allowing an alternating current to pass only in one direction through an electrolytic cell.

Columbium has been used in lamp filaments and in jewelry, it being capable of being colored by an electrolytic process. It is used in specialized alloys, carbides, welding rod, etc. A principal use is an alloying element in stainless steel, to which it lends additional corrosion resistance, particularly at high temperature.

Columbium defies heat: Newest of the nuclear metals is pure columbium (niobium). This metal, usually produced as the ferroalloy, is well known to chemical engineers as the stabilizer in type 347 stainless steel.

AEC bought several thousand pounds of columbium recently, has current contracts with Kennametal Corp. and Wah Chang Corp. for 7,500 pounds apiece. Fansteel Metallurgical Corp. reports it has sold substantial quantities of pure columbium for use in experimental thermal reactors, such as the boiling-water type at Argonne National Laboratory.

Columbium offers superior heat and corrosion resistance. Although much of its significance to nuclear energy is still shrouded in secrecy, columbium is known to be suitable for cladding cores of fast reactors and for alloying with uranium to make fuel elements.

Like other nuclear metals, columbium looks for nonnuclear markets. Most promising of these, such as aircraft jet engines, will capitalize on columbium's resistance to high temperatures.

Researchers are closing in on the development of niobium as a high-temperature structural metal. Westinghouse Research Laboratories says it has been able to produce the purest niobium ever made on a scale large enough for realistic scientific study of the metal.

A newspaper article recently printed in a Pittsburgh paper follows:

"Niobium is new wonder metal of missile research: Niobium, an element almost ignored since it was classified more than a century ago, suddenly has become a bright star on the nuclear and missile horizons.

"Scientists say the tough metal offers excellent promise as a structural metal at temperatures above 1,800° F. The United States Air Force is vitally interested in niobium research.

"Metallurgists call niobium the latest wonder metal. That puts it in a class with titanium and zirconium, both of which are playing major roles in missile and nuclear advancements.

"Niobium attracted scientists' attention about 5 years ago and quickly moved to the high-priority research list in many of the metal industry's laboratories.

"After a few years of research, scientists reported niobium, once called columbium, has unique high-temperature properties and possesses valuable new structural characteristics.

"The future of niobium was brightened considerably by two recent developments.

"The Westinghouse Electric Corp. discovered a new technique for producing ultrapure niobium; large reserves of niobium ore were discovered in Canada.

"A Westinghouse spokesman said niobium is relatively light—it is slightly heavier than iron—and is not brittle at room temperatures, as are other high-temperature metals.

"One of niobium's biggest hurdles is production costs. A pound of niobium powder processed ore now costs $85."

From Chemical and Engineering News, November 4, 1957:

"Niobium goes jet age: Du Pont joins Thompson Products in joint development agreement for aircraft and missiles.

"Reports that Du Pont had new interest in niobium, and was buying columbite ore in Nigeria, came to life last week. Officials disclosed a joint-development agreement with Thompson Products to step up progress of the metal. Goal: jet aircraft, missiles, and atomic reactors.

"Du Pont will supply niobium alloys; Thompson will develop forging and other fabrication techniques. Researchers claim that niobium alloys, used in turbine buckets and other critical parts, could lead to more efficient engines—with turbines capable of running at higher than 2,000° F. Present operating limit on gas-turbine engines is about 1,659° F.

"Spokesmen won't say what process is being used to reduce the ore and purify the metal, except that a number are under consideration. It's likely that both sodium and magnesium processes are included. Du Pont also says it's too early to tell about any commercial operations. Some niobium custom melting has been done for Du Pont at Stauffer Chemical's Richmond, Calif. plant via electron bombardment. Nigeria isn't the only place Du Pont's buying the ore; it says it's also buying elsewhere on the open market."

Chemical and Engineering News, May 26, 1957:

"Niobium's future unlimited: AEC sparks interest; metal looks like the best performer yet in high temperature corrosive service.

"Since removal of Government controls on niobium in 1955, rapid strides have been made in supplies, processing, and uses of the metal. Hottest technology development: Use of pure niobium metal and high-niobium alloys in atomic reactors and aircraft jet engines.

"The Atomic Energy Commission first purchased pure niobium metal in August 1955. It bought 350 pounds at $98 a pound. Additional purchases made in 1955 and 1956 indicate use of the metal to date in reactor development approaches 20,000 pounds. AEC's 1957 contracts call for 7,500 pounds from Kennametal Corp. at $67.25 a pound, and 7,500 pounds from Wah Chang Corp. at $54.70 a pound.

"Niobium interests AEC workers primarily, says Ronald L. Carmichael, of Battelle Memorial Institute, because it is suitable for cladding cores of fast reactors. Here, niobium is stable and effective in preventing fission products from entering the system. It also surpasses other metals, such as zirconium, molybdenum, and vanadium, in resisting heat and corrosion, he says.

"Medium to high niobium content alloys are being developed currently by several research groups, primarily for aircraft jet engine parts. Materials that will permit operation at about 2,200° F. are anticipated, whereas engines are now built to operate at 1,700° to 1,900° F. An alloy that will allow these temperatures to be exceeded will also allow new engine designs. Use of niobium as an alloy for this purpose, therefore, is likely but some few years away.

"Future consumption of pure niobium metal will run between 10,000 and 60,000 pounds a year, depending on the success of AEC's experience, estimates Carmichael. And, if niobium-based alloys can be sold at competitive prices, he believes demand could reach a million pounds a year.

"In addition to these newer developments, the amounts of niobium required in established uses are also increasing. These include its addition to specialized nonferrous alloys, stainless steels, and welding rods, and its use in making niobium carbides.

"Special nonferrous alloys: Niobium and tantalum are among the most effective carbide formers to increase high-temperature strength in superalloys—special metals having outstanding physical properties, such as high heat and corrosion resistance. They also improve workability of the alloys. Thus, almost all niobium consumed in nonferrous alloys represents small amounts added for improved special properties.

"Use of niobium in these alloys was Government restricted until early this year. Now, development in so rapid, Carmicael says, that some believe this use may be exceeding use of niobium as a stabilizer in stainless steels.

"More than 30 niobium-containing superalloys are being made. Niobium content ranges from 0.44 to 4 percent. Some of the better known are S–816, N–155, and Inconel–X. However. a newer one was used for the fuel plates in the Argonne EBWR. It contains 1.5 percent niobium, 5 percent zirconium, and the balance uranium. All the niobium used in this 5,000–kilowatt reactor totals about 250 pounds.

"Stainless steel stabilizer: In spite of slow recover since the Korean war, the outlook for niobium in stainless steels is good, Carmichael says. It is added to austenitic chromium-nickel stainless steels to prevent carbide precipitation in the 800° to 1,600° F. range.

"Traditional use of type 347 stainless is in chemical and petroleum processing equipment operating at high temperatures with corrosive atmospheres. Steam turbine-generator developments also are creating new markets for type 346 in rotors and high-temperature steam liens.

Nuclear-energy equipment uses both types 347 and 348 stainless because of their low-radiation pickup and excellent corrosion resistance. This market alone could require 20,000 tons of stainless steels a year in another 5 years, says Carmichael, and much of it will be niobium stabilized.

"Supplies: As late as 1954, reserves of niobium were largely undeveloped and in some cases, unknown. They were believed to be too limited to supply a growing industry, says Kenneth B. Higbie, of Beryllium Corp.

"On the West Fork of Bitterroot River in the extreme southern point of Ravalli County. The columbite deposit is on the hillside east of Sheep Creek just above (south) of its junction with the West Fork. It is 40 miles by road south of Darby on United States Highway No. 93, and the terminus of the Bitterroot Branch of the Northern Pacific Railway.

"Louis Erickson of Corvallis, discovered the deposits on identifying a columbium-bearing mineral picked up on a prospecting trip. The identification was verified by the Montana Bureau of Mines and Geology. The discovery pit is on the Dark Star claim. In the main cut, the "dike" or vein is exposed 12 feet vertically. The strike is N. 67½° W. The dike dips 77° NE. at the top of the cut, but straightens to vertical near the bottom. The width here is 5 to 6 feet. The "ore" is a pinkish to brown carbonate rock containing stubby prismatic crystals of columbite as much as 2 inches across. Yellowish crystals of monazite can be recognized in the black columbite with a hand lens. Considerable vermiculite or altered hydrobiotite occurs in the vein. The wall rock is a fine-grained gneiss and considerable hornblende gneiss occurs nearby.

"According to a spectrographic analysis by the United States Geological Survey, the columbite contains no tantalum, a fact verified by X-ray fluorescence by the Montana Bureau of Mines and Geology. X-ray fluorescence of a mixture of columbite and the fine-grained pinkish mixture by the Dow Chemical Co., showed the following (No sensitivity for elements below atomic weight 39):

	Percent		*Percent*		*Percent*
Columbium	5.0	Neodymium	0.65	Barium	0.7
Strontium	3.6	Cerium	3.0	Calcium	35.0
Manganese	.5	Lanthanum	2.0	Iron	2.4

"The United States Geological Survey tentatively identified the fine-granular pink material as one of the unusual rare earth carbonates similar to ancylite. Most of the matrix appears to be a ferruginous calcite or ankerite.

"A small test shipment of selected columbite ore was shipped to the Government purchasing depot in South Dakota by William Van Matre of Butte in 1955."

This is in reference to our No. 1 mine which we have leased and are currently working along with other holdings in the same area.

The following appeared in the Ravalli Republican, the Hamilton, Mont., daily newspaper dated December 6, 1957:

"CONTINENTAL COLUMBIUM CORP. DEVELOPING RARE EARTHS IN WEST FORK; POSSIBLE FULL-SCALE MINING SEEN

"Another of the significant 'hot spots' of the strategic minerals industry is apparently developing in Ravalli County.

"As the development program on Continental Columbium Corp.'s leases in the Sheep Creek area continues, engineering data indicates the substantial deposits of columbium and rare earths materials are classed with or above the largest in the United States.

"To date, there has been only one other sizable deposit of columbium reported as being commercially workable in the country, that one near Boise, Idaho, in a placer deposit.

"LATEST WONDER METAL

"Columbium has been called the 'latest wonder metal' by scientists because its great corrosion resistance and extremely high temperature structural compatability places it above many other alloying metals for use in cladding the cores of high speed atomic reactors.

"Continental Columbium has been carrying on an intensive development and engineering program in the Sheep Creek area since June of 1957, under the direction and supervision of Dr. Harley Sill, one of the Nation's most respected mining engineers.

"His most recent eminence came through his development of a highly successful Sill cobalt process.

"MILL WORKING IN SPRING

"Continental is presently carrying on exploration in three adits and plans to begin mill erection sometime in the spring. Full-fledged mining and milling is contemplated by midsummer, if conditions permit.

"The company has leased a number of claims in the West Fork section and is contemplating others. Communications concerning this phase of the operation can be addressed to R. C. Gess, Box 109, Hamilton."

There are many more articles on the subject, of course, but obviously I cannot include everything that has been written in this report. If you would still like more information I suggest the public library. You can find a six-page article titled "Niobium: The medium rare metal" in the October 1957 issue of Industrial and Engineering Chemistry, and many others.

In concluding I wish to emphasize again the benefit to our corporation from the caliber and services of men like Dr. Harley Sill.

Dr. Sill's ability has again come into prominence with the development of his patented Sill process of metal recovery. Let me include here just one paragraph, from a several page magazine article, written about the process. There are many others.

"Sill process now on stream: Hydrometallurgical method of handling 'problem ores' replaces conventional smelting procedure.

"Full-scale commercial operation of the Sill process for recovering base metals from 'problem ores' of the sulfoarsenide type (cobaltite) is now underway at the Newburgh, N. Y., plant of Metallurgical Resources, Inc. This culminates 8 years of laboratory and pilot-plant research by Dr. Harley A. Sill, distinguished for his many years of service in the field of extractive metallurgy."

Dr. Sill has successfully helped to develope and establish many mining operations such as ours in his 50 years of experience. We feel fortunate in being able to work hand in hand with this experienced and able engineer.

Dr. Sill's assuring words to me personally are that, "We are going to build a successful and enduring mining operation. We will not fail," and I believe him.

Respectfully yours,

A. V. JENAN, *President.*

We will stand adjourned subject to the call of the Chair.

(Whereupon, at 5:15 p. m., the hearing was adjourned, subject to the call of the Chair.)

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